

NEW

THE STORY OF



PEARL HARBOR

THE DEADLY ATTACK THAT DRAGGED THE USA INTO WAR

PLUS

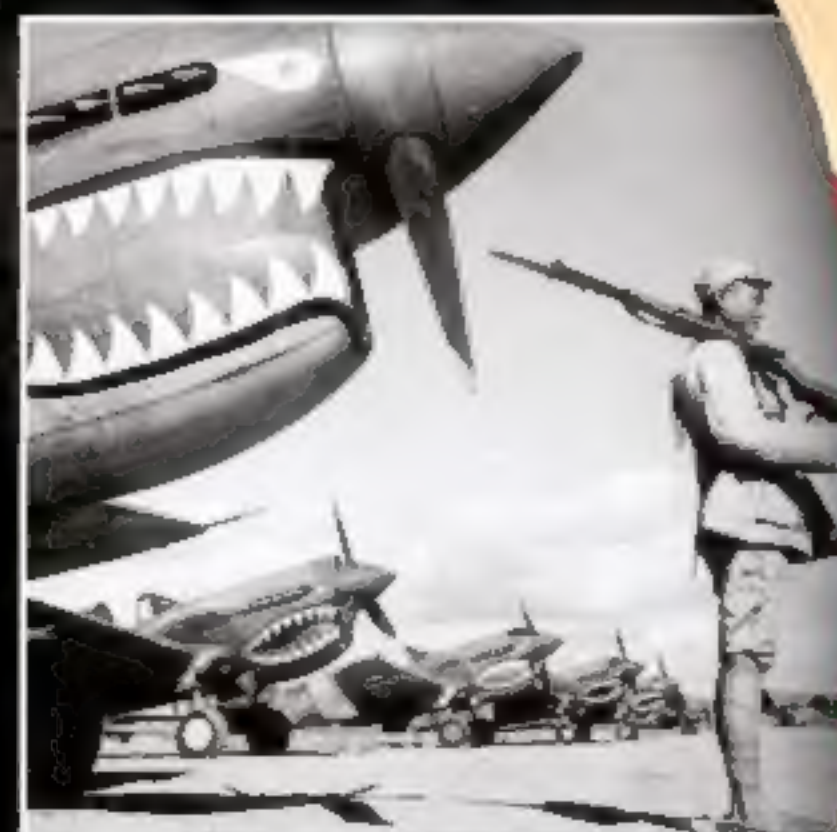
The showdown
at Iwo Jima



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WELCOME TO

THE STORY OF
**PEARL
HARBOR**



s morning broke in Hawaii on 7 December 1941, the water was calm. The US Navy's ships stood proud in the harbour, and their crews were looking forward to a Sunday off. But these would be the last moments of calm before the United States was dragged into a war that was consuming the world.

In *The Story of Pearl Harbor*, uncover what really happened that fateful December day and explore the extensive Japanese planning in the months leading up to the attack. Find out how the Americans got a lucky break, and follow the troops from both sides around the Pacific as they fought viciously and tirelessly for glory, their nation and, most of all, survival.





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THE STORY OF PEARL HARBOR

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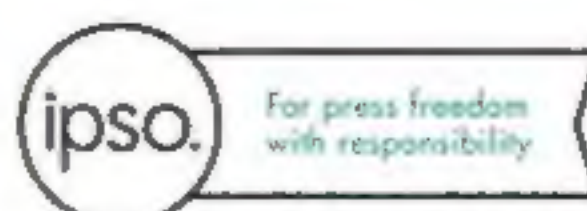
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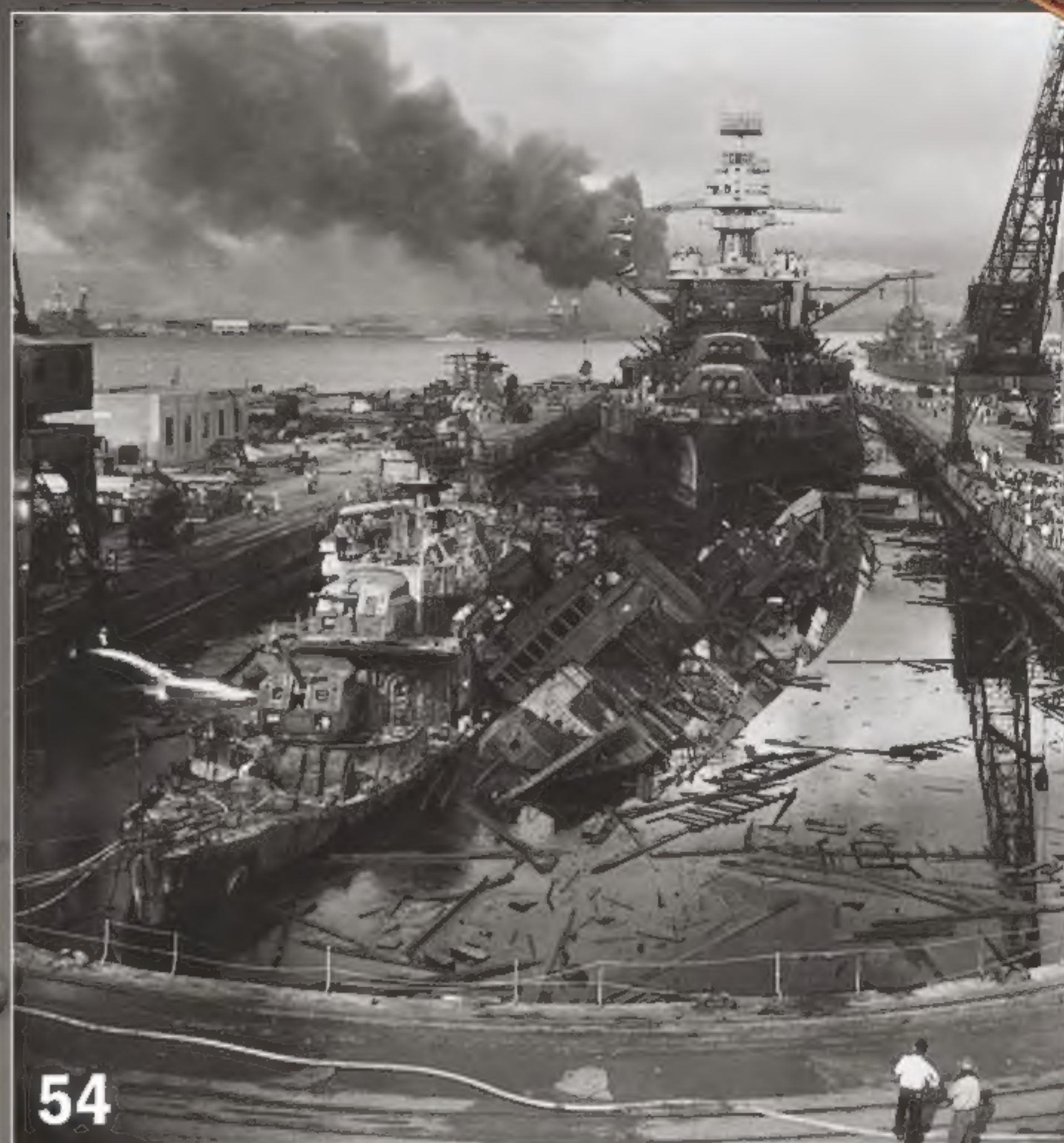
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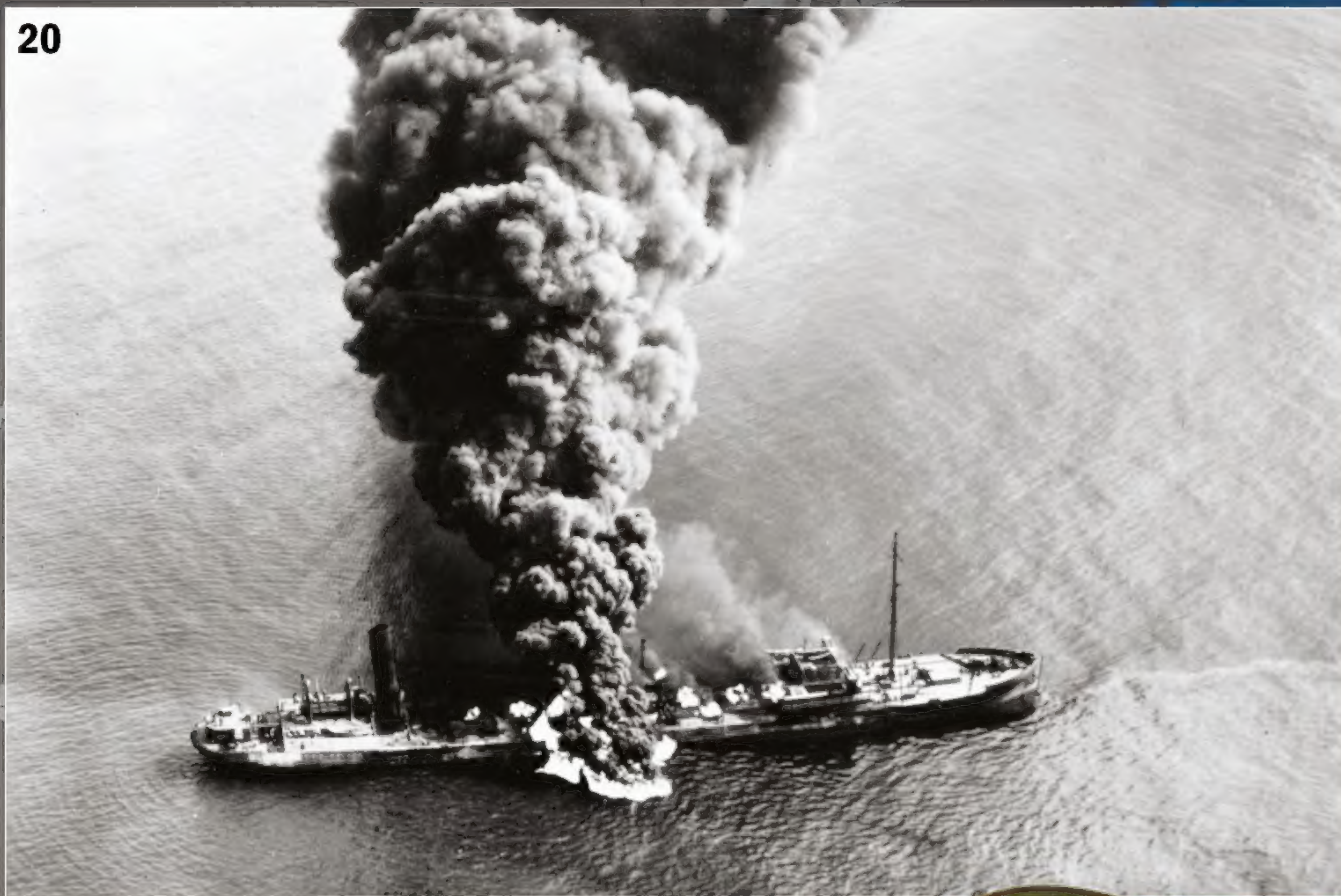
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TROUBLE RISING

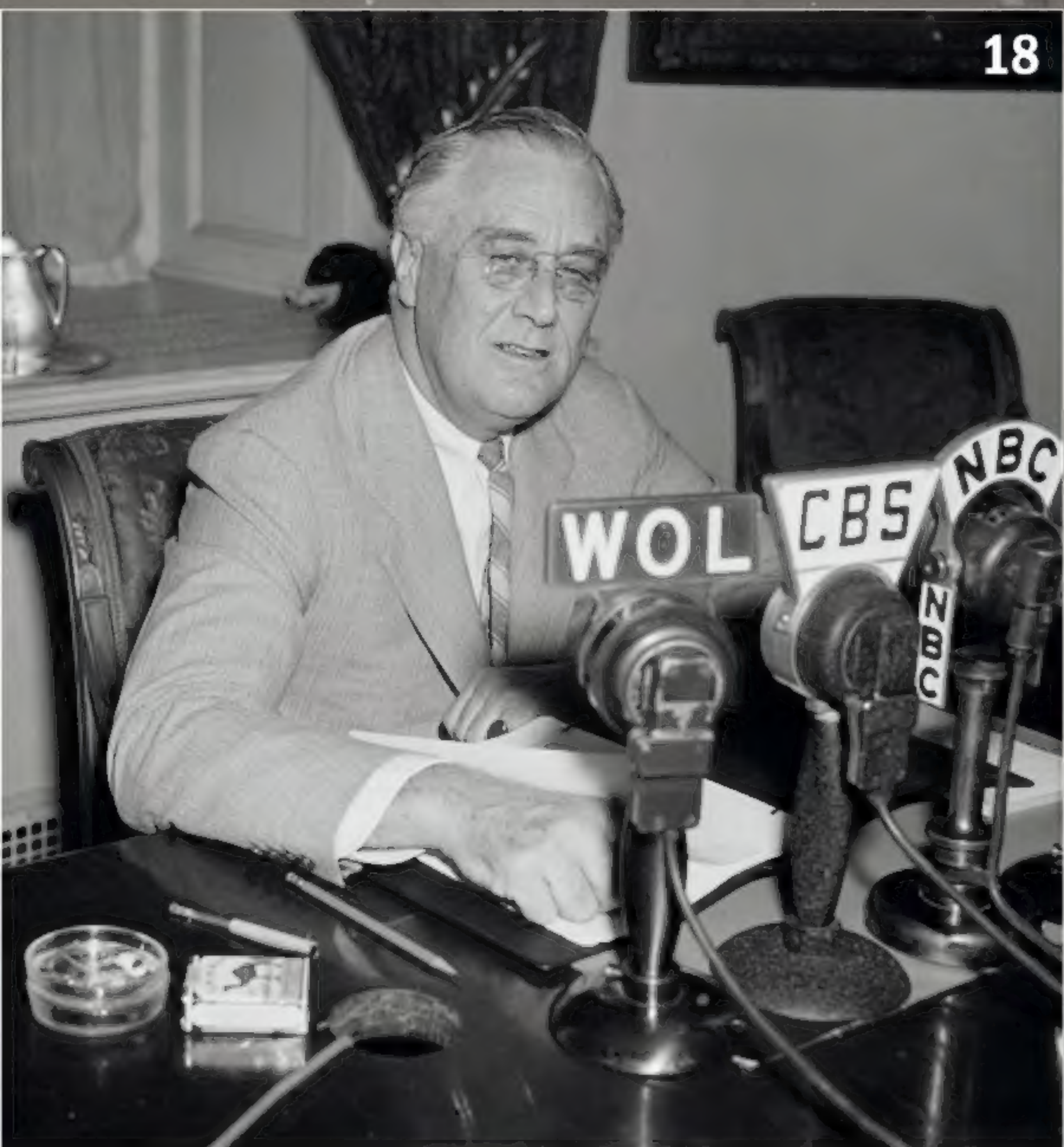
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JAPAN 1937

A STATE OF WAR

INTOXICATED BY VISIONS OF IMPERIAL CONQUEST, JAPAN'S FANATICAL MILITARISTS LAUNCHED A GENOCIDAL CAMPAIGN TO SUBDUE CHINA AND PLUNDER ITS RESOURCES



Only a peculiar madness could inspire the aspiration to carve up East Asia. For Japan's generals and statesmen, however, this was imperative to create their world empire, even when it was totally unfeasible.

How far within a hostile country could an army of occupation travel before it became bogged down? How many soldiers, bullets, tanks, ships and planes would it take? What about the untold millions to be checked by a permanent garrison? And what of the risk of sanctions, of Western interference? None of these quibbles seems to have shaken the Imperial Japanese Army's resolve as it set about fulfilling an ancient dream, but where this dream originated is hard to discern. What historians now refer to as the Second Sino-Japanese War is commonly overshadowed by the events after 1941. Not even its excesses and brutality caused too much alarm among the Great Powers – not until modern times, at least.

DREAMS OF AN EMPIRE

There once was a dream among the fighting men of Japan, whose tireless martial vigour mired their nation in endless civil war. It was a dream of boundless empire acquired by merciless brute force. In the last decade of the 16th century, the warlord Toyotomi Hideyoshi launched two campaigns to conquer the Korean peninsula. Once a foothold on the

Asian mainland was established, his legions of Samurai and musketeers would then march on Peking and subsequently rule China.

Both endeavours were spectacular failures and Hideyoshi died soon after his last debacle. Japan closed its doors and outlawed its guns. Christian missionaries were expelled throughout the realm. Then, after 250 years of domestic peace and isolation, an American naval squadron would force Japan to accept free trade – a rude awakening for the complacent Tokugawa shogunate. By 1889, Japan had adopted a new constitution, modelled after Prussia's, and became a constitutional monarchy.

A modern army soon followed. Six years later, the embers of Hideyoshi's far-fetched dream were alight once more. The First Sino-Japanese War was a raw display of Japanese tenacity and firepower in the face of superior Chinese numbers. Humbled, the diplomats of the Qing Dynasty agreed to a humiliating peace deal in the Japanese city of Shimonoseki.

Not only did China lose the Korean peninsula for good – granted 'independence' under Japanese supervision – but the island of Formosa as well. Worse, resource-rich Manchuria was now within Japan's grasp. The only hindrance was the Imperial Russian Navy's presence in the Kwantung peninsula, a state of affairs brought about at the last minute as Japan imposed its terms on China.

A decade later it was Russia's turn to be at the receiving end of Japan's armed forces. In a

■ Japanese soldiers fighting in a town in the province, near Nanking





series of spectacular battles from Port Arthur to Tsushima, Japan's sheer fighting prowess during the Russo-Japanese War of 1904 to 1905 established its credentials as a Great Power. It had become an exemplar for every nation suffering under the yoke of colonialism and rapacious European dominance.

Japan's latest triumph against a larger adversary featured another chilling side effect. After the war, like the decrepit Qing Dynasty with its increasingly tenuous hold over China, the Russian Empire's own seams would begin to unravel in a tortuous decline that climaxed with the 1917 Bolshevik Revolution.

Rather than bask in its new-found status as an ocean-going power, another problem faced the Japanese elite: a rigid alliance of landed families-turned-industrialists and the political status quo. The country had become too successful and was resource poor.

The gifts of the 20th century were too generous to the Empire of Japan. Made up of an archipelago of three main volcanic islands prone to earthquakes, with very little arable land and no fossil fuel deposits, Japanese industriousness created a population boom that only grew year on year. As an Asian power with a Prussian cast imposed by its constitution, a convivial and democratic outlook on national life never really figured in political discourse.

Japan needed to be strong – if the world did not accommodate its needs, it would accommodate itself. The revolution that swept China in 1912 was a boon that allowed further Japanese gains into its main rival's economy. By this time, Japan had mastered planning its economic foundations of coal, railroads and factories. Korea was its offshore base for cheap labour. This was not enough, though; Japan needed to be stronger, even unassailable. An opportunity lay beyond Korea, across the Yalu River, in glorious Manchuria.

AN INDUSTRIAL UTOPIA

Manchuria was an exciting, rugged and unforgiving place. Until the 20th century Western travellers were only able to describe it in the most basic terms – its geography and the weather. The region's ill-defined borders were the Yalu River and the Yellow Sea to the south, to the east and north were the Usuri and Amur rivers, the natural boundaries separating it from Russia where the steppes merged with the tundra and taiga, and to the west was Mongolia's grasslands.

At the end of the First Sino-Japanese War in 1895, Manchuria was coveted by Russia as the last piece of its Siberian domain. With the blessing of France and Germany, Russia was able to position itself as China's defender,

“JAPAN NEEDED TO BE STRONG – IF THE WORLD DID NOT ACCOMMODATE ITS NEEDS, IT WOULD ACCOMMODATE ITSELF”

seizing Port Arthur and keeping Manchuria out of Japan's clutches.

In reality, Russia was just as eager to lay down railways and set up factories. Timber, minerals and vast tracts of arable land were for the taking. Harbin, China's northernmost city today, was founded by the Russians, who quickly turned it into a boomtown with its attendant recklessness and ostentation.

But Manchuria's forbidding mountains and steppes were home to the indomitable Jurchen tribes. During the 11th century these mounted nomads federated and subdued northern China long before Genghis Khan's hordes did the same. In the mid 17th century, their descendants repeated history. Organising themselves into an army, the Manchus toppled the Ming Dynasty and ruled China at its height as the Qings.

At the end of the Russo-Japanese War in 1905, Manchuria was ripe for the taking. Japan could not take it, however, since this

THE BATTLE OF SHANGHAI

When two massive armies clashed over the greatest city in Asia, the continent witnessed carnage on a scale that had never been seen before

Eager to secure their control over Manchuria, Japan's militarist clique planned to invade the mainland and force Chiang Kai-shek from power. The first domino to fall would be Shanghai.

The problem was the only Japanese forces stationed in Shanghai were a detachment of naval infantry, and sending more would arouse suspicion. There needed to be a reason for the arrival

of Japanese troops. Taking their cue from the Mukden Incident and the outbreak of the Philippine-American War in 1899, it was decided that a single ambiguous crisis would launch the war.

After Chinese sentries allegedly gunned down a lone Japanese officer in Shanghai, one clash led to another and by 13 August, thousands of Chinese and Japanese troops were already fighting within the city.

Lasting for three months, from 13 August to 19 November, the battle would be the most savage fought in the pre-World War II era and included a daring amphibious assault by the Japanese on the mouth of the Yangtze River.

The Imperial Japanese Army (IJA) and Navy would use all of their assets to quash the National Revolutionary Army defenders, who fought heroically despite high casualties. These qualities made battles like the struggle for Sihang Warehouse the stuff of legend.

In typical fashion, the well-equipped but poorly led Chinese lost up to 250,000 soldiers defending Shanghai and only succeeded in slowing down the IJA, who razed the capital Nanking a month later.

“THE BATTLE WOULD BE THE MOST SAVAGE FOUGHT IN THE PRE-WORLD WAR II ERA”



■ Japanese soldiers in China in 1937

SUPPORT FOR CHINA

A conflict between two hegemonic Asian giants, the war's intensity inspired an outpouring of propaganda



UNITED CHINA RELIEF

Massive US aid to China did not begin until mid 1941, replacing the earlier generosity of the French, Germans and Soviets

NAVY, ARMY, AIR FORCE

In this scene, Chiang Kai-shek looks on as his air force and navy arrive to thwart a Japanese armada



EIGHTH ROUTE ARMY IN SHANXI

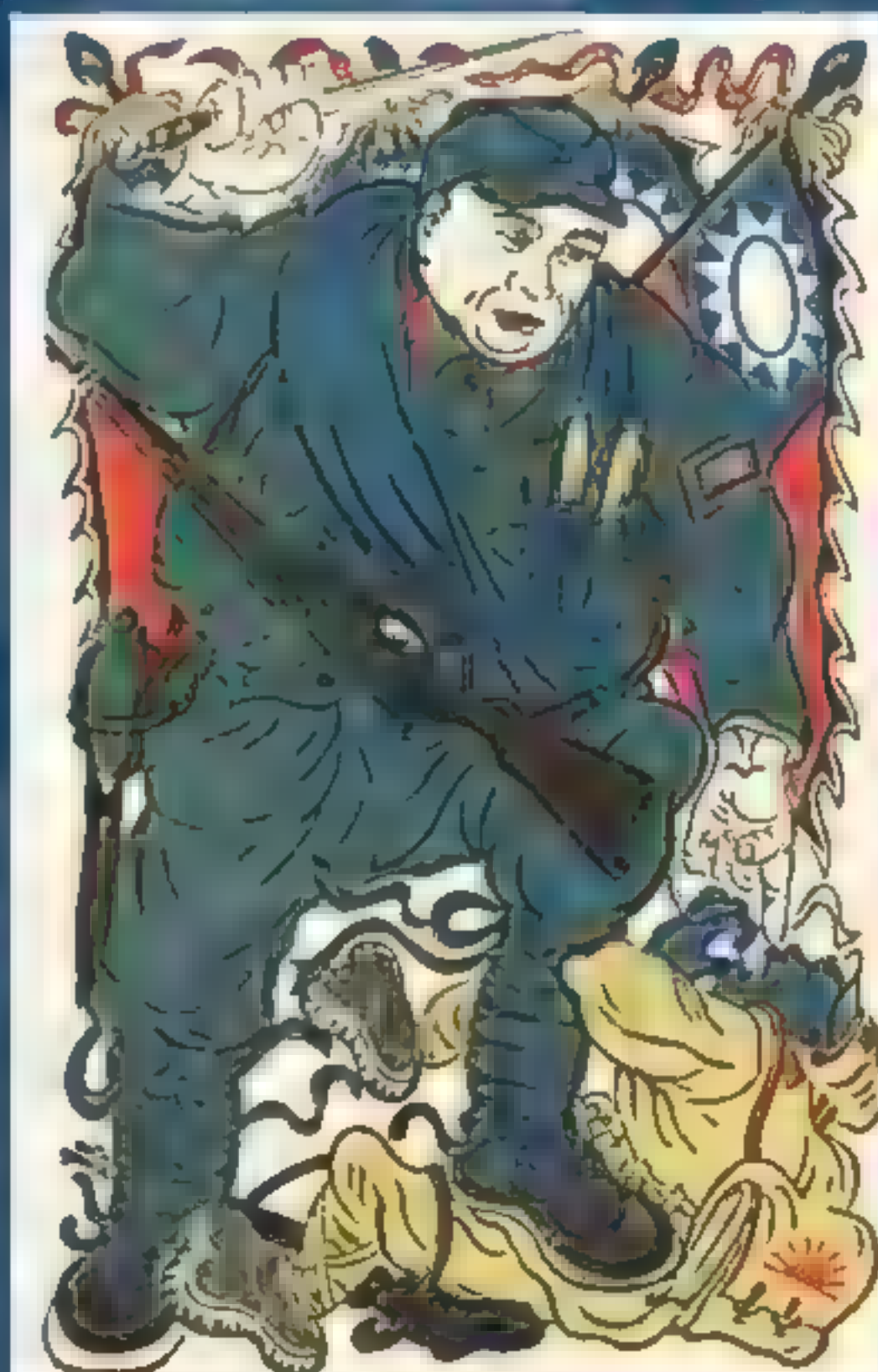
By 1937, the Republic of China already had a vast and modern army to defend itself thanks to foreign aid

"MASSIVE US AID TO CHINA DID NOT BEGIN UNTIL MID 1941, REPLACING THE EARLIER GENEROSITY OF THE FRENCH, GERMANS AND SOVIETS"



NRA ANTI-JAPANESE WAR POSTER

In this undated poster, a hulking NRA infantryman clutching a gleaming bayonet overwhelms his child-like Japanese rival cowering beneath him



would provoke another conflict. The stratagem that suited its designs best was a cunning one. If modernisation had a single impetus, it was the cycle of accumulating and investing capital, and the imperial state had perfected modernisation.

According to Louis Livingston Seaman, MD and veteran of the Spanish-American War and the Boxer Rebellion, Japan's arrival in mainland China bode well for the future. As explained in his book *From Tokio Through Manchuria*, published in 1905, the Japanese army and navy were models of efficiency.

Dr Seaman insisted their presence was needed to stop Russia. "It would indeed be a peril and terror to civilisation were these hardy peasants of Manchuria and the countless hordes of China transformed into minions of the White Czar," he wrote.

Nine years before World War I, long before the Treaty of Versailles and its limitations on the Imperial Japanese Navy's tonnage, Dr Seaman believed Japan acted as a regional balancer. He continued: "The main present hope of security against this lies in a complete victory of the patriots of the Land of the Rising Sun, which shall effectually stem the tide of Russian aggression for this generation at least, thus giving China one more chance to 'put her house in order'."

In the final chapter of *From Tokio Through Manchuria*, Dr Seaman was earnest in his best wishes for China, then the proverbial 'Sick Man of Asia'. "So long as England, Japan, and our own land (the United States) stand for the integrity of this great unwieldy empire, the machinations of her foes will assuredly be circumvented," he wrote.

Perhaps something that was beyond Dr Seaman's ability to foresee was just how sinister the Imperial Japanese Army's administration of Manchuria would become. In the ensuing decades, they turned it into a colony with its very own state-within-a-state, the Kwantung Army.

A less dramatic though insightful account of Manchuria's importance to Japan's progress comes from a book titled *The Economic History of Manchuria*. Published in 1920, it was prepared by men from the Chosen Bank (pronounced choh-san), a financial institution based in Seoul, run by the Japanese.

The book's author was very frank about Chosen's activities in Manchuria, where it had more branches than in the whole Korean Peninsula. This was necessary because "Manchuria had ever been a tempting field for the bank but then the trade of Chosen with the country was anything but such to justify its financial policy."

Founded in Seoul in 1909, a Japanese Imperial decree in 1917 made Chosen Bank the sole provider of Japanese bank notes in Manchuria. Of course, such a captive market needed to be kept; by force if necessary.

FROM COLONIALS TO CONQUERORS

The Second Sino-Japanese War was actually just the bloodiest phase of a long struggle to capture the Chinese heartland. 30 years previously, the Empire of Japan already had its foothold in Manchuria. In the following years



■ As the Japanese invaded, civilians fled from cities such as Peking

THE RISE OF HIDEKI TOJO

Taciturn, single-minded and a ruthless empire builder, Tojo was an oriental Spartan and the unwitting architect of Japan's humiliation

When Hideki Tojo became prime minister of Japan in 1941, Asia was at the mercy of an unremarkable man. Born in Iwate Prefecture to an army sergeant and the daughter of a Buddhist priest, Hideki was the eldest of three sons and groomed for a military career from an early age. As a result, his world view was framed by his martial upbringing. At 1.6 metres tall, with poor eyesight and a career that was mostly spent in staff positions, Tojo was a hard worker with simple tastes. Serving as military attaché to Germany during and after World War I left a deep impression on him and he was smitten by the idea of national industry subordinate to national will. These experiences led to his involvement with the One Evening Society and the Kodoha movement – each being secret militarist initiatives to prepare Japan for total war. Other than leading the Kempetai intelligence service in Manchukuo and orchestrating the invasion of Inner Mongolia in 1937, Tojo had little combat experience. As minister of war and then prime minister, he had absolute faith in Japan's destiny as a Great Power and believed any means necessary should justify this end, like the attack on Pearl Harbor. He was executed for war crimes on 23 December 1948.

■ As war minister, Tojo gave the Japanese the order to attack Pearl Harbor



its control of the region grew exponentially, so much so that this mutation of Japan's borders, which now spread across East Asia, created the dangerous strains that paved the way for its eventual defeat in World War II. One of these strains was the ambiguous existence of the Kwantung Army.

Despite its ominous name, the Kwantung Army began as a small garrison tasked with protecting the Japanese-owned railroads that transported Manchurian produce to Korea. But as time went on, its size and role changed. With the benefit of hindsight and historical records, it appears the Kwantung Army's distance from Tokyo made its officers more autonomous, more daring, and reckless.

On 4 June 1928, Chinese warlord Zhang Zuolin was assassinated by a bomb in his railway car. This early attempt to subvert Manchuria was inconclusive, but three years later the Kwantung Army overran the area.

The following month, a bomb blast on the South Manchuria Railway led to further military action and the establishment of 'Manchukuo'. It was a daring endeavour to found an industrial colony in China's unforgiving frontier. The deposed Qing emperor Puyi was even rustled out of his post-imperial life to serve as the nominal head of state.

What made these land grabs so frequent was China's weakness. The Republican Era that began with Sun Yat-sen's revolution in 1911 was a disappointment. By the 1920s the Kuomintang government only had nominal control of China, and warlords ran fiefdoms that included whole provinces. So the Kwantung Army, with or without the approval of Tokyo's civilian leaders, took the initiative to expand its territory until it neared its deadliest rival: the Soviet Union.

All the years of subterfuge and belligerence in northeast China were minor acts in a grander drama. The Kwantung Army needed to be secure and impervious should the day come when the rival Red Army came crashing down the steppes, across the Amur River, and right into the intended breadbasket of Japan.

THE TWO SIDES PREPARE

What is often missed when assessing Japan's national character before World War II is that the political and military leaderships were often at odds. As the Kwantung Army and its officers went about the task of colonising Manchuria, the Imperial Japanese Army and Navy were making preparations for the next war.

Even when anachronistic concepts like 'Hakko ichiu', best described as a Japanese version of *Manifest Destiny* and *The White Man's Burden*, gained popularity in the 1930s, it took an unstable officer class to intimidate and bully

CHINA'S RESISTANCE

Doomed by its own incompetence, the Kuomintang military compensated with sheer numbers equipped with a vast selection of European arms

TRAINING

By 1928, Chiang Kai-shek had unified the crumbling Chinese state with the massive National Revolutionary Army at his disposal. Millions strong, an elite corps of 300,000 officers and soldiers, trained by German advisors were ready for a showdown with Japan by 1937.

STRUCTURE

This depended wholly on foreign advisors. Some units were staffed and run like their European counterparts, while others were mired in anarchy. Other units didn't exist at all except on paper and in press releases. Sporadic warlord armies were quite cohesive, but small.

EQUIPMENT

Between poor administration and a modest industrial base, it was only possible to equip the army with locally made small arms. Planes, tanks, ships and artillery were imported from abroad. This over-reliance on foreign aid meant the army did not have a capacity to replace its losses.



Chinese soldiers armed with ZB-26 guns

EFFECTIVENESS

The most effective divisions of the Chinese army perished during the Second Battle of Shanghai in 1937. Others became bogged down suppressing the communists in the interior provinces. If the Chinese had one advantage, it was sheer manpower. The record of the Republic of China's armed forces is an ignominious one. Though successful in almost quashing the nascent communists, it was completely ineffective against the IJA. Even when Chinese generals were often very competent, their loyalties and motivations were highly questionable.



The National Revolutionary Army had its own small armoured corps using the French Renault FT-17 light tank

the government before Japan could fulfil its imperial goals.

The same year the Kwantung Army overran Manchuria on a flimsy pretext, a pseudo-putsch took place in Tokyo. From 1932 to 1936, there was a campaign by the military, the police, and the Kempeitai to snuff out communists, subversive elements and politicians who disagreed with the ideals of *Hakko ichiu*.

It was apparent a campaign was being waged by a deep state. It had no membership list or manifesto, but it had a name. The mysterious 'Kodoha' believed the first step towards

realising an unassailable Japanese empire was seizing power by whatever means. In 1936, the Kodoha's clout meant that the Imperial Japanese Army and Navy (IJA) were readied for the greatest war in Asian history.

Preparations for this momentous struggle had been under way for years. When the US War Department commissioned studies on Japan's military, the results revealed an efficient fighting machine with a vast arsenal. The IJA's Air Service had thousands of trained pilots and aircraft. The navy was the best in the eastern hemisphere.

The Japanese infantryman, airman and sailor were formed in the same mould. No matter the branch, training was exacting, harsh and literally painful. The Japanese soldier was often portrayed as a yellow-skinned and bow-legged malefactor – in reality, he was a young man who was punished, beaten and humiliated by his superiors on a regular basis.

But he had an excellent rifle in the 6.5mm Model 38, which was later replaced by the more powerful 8mm Model 94, colloquially known as the 'Arisaka'. Japanese infantrymen

"THE MYSTERIOUS 'KODOHA' BELIEVED THE FIRST STEP TOWARDS REALISING AN UNASSAILABLE JAPANESE EMPIRE WAS SEIZING POWER BY WHATEVER MEANS. IN 1936, THE KODOHA'S CLOUT MEANT THAT THE IMPERIAL JAPANESE ARMY AND NAVY WERE READIED FOR THE GREATEST WAR IN ASIAN HISTORY"



■ Above: During the Battle of Shanghai, Japanese soldiers fire through holes in a brick wall

■ Left: Japanese soldiers cross the moat to enter the Gate of China, Nanking's southerly city wall

■ Below: A baby sits among the ruins of Shanghai



also had a quaint muzzle-loaded 50mm grenade discharger for intermediate ranges as well as a semi-automatic 20mm anti-tank rifle. A lethal variety of machine guns and mortars were available to IJA companies, as well as light tanks and towed artillery. Simply put, Japan's military was ready for its next war.

By comparison, in 1937 the Kuomintang's National Revolutionary Army (NRA) was in questionable shape. Ever since Chiang Kai-shek assumed power in 1928 he had gone about setting China's house in order. At first he almost got rid of the communists under Mao Tse-tung, then he subdued the provincial warlords to assert the Kuomintang's authority.

Both efforts were a success, encouraging the European powers to make resources available for the NRA's modernisation. Western advisors had an important role in moulding the NRA into a professional military that ranked among the world's largest. Most prominent were an unspecified number of Germans, including Colonel General Hans von Seeckt, who fought the Russians in World War I's Eastern Front.

Von Seeckt and a succession of officers gave Chiang Kai-shek a well-trained and highly motivated corps of 300,000 men by 1936. Added to this were between 900,000 to

1 million auxiliaries. Thanks to foreign aid, the NRA had access to a modern, albeit limited, arsenal. Small arms like the 7.92mm Mauser 98K and the 8.5mm ZB-26 machine gun gave the NRA infantry top-of-the-line firepower.

Limited amounts of modern artillery and light tanks – French Renault FT-17s and Soviet T-26s – also reached the NRA. On the eve of war with Japan, the NRA was laying the groundwork for what would become the Republic of China Air Force. This time it was the Soviet Union that provided the hardware to the Chinese, approximately 500 propeller-driven light fighter aircraft and more than 300 bombers. The navy, on the other hand, possessed modern gunboats and cruisers.

A STUMBLE INTO HELL

As it turned out, it took a bizarre string of events to set the NRA and the IJA against each other. Two incidents, one in Shanghai and the other in the former imperial capital Beijing, would spiral out of control and start an epic battle involving millions.

In July 1937, units of the Kwantung Army seized Beijing's historic Marco Polo Bridge and in August a Japanese navy officer was killed by Chinese sentries in Shanghai. There continues to be speculation that NRA General Zhang Zhizhong orchestrated the incident to provoke a war at the behest of Stalin. Apparently, Zhang was a high-level Soviet agent.

The resulting three-month battle for Shanghai, from 13 August to 19 November, was a futile one. In the span of 100 days, the NRA was almost eliminated but the IJA had

received a rude awakening. The Chinese could put up a tremendous fight and rising Japanese casualties posed a threat to any invading force's momentum.

The Kuomintang and its military had the worst of it, however. The IJA might have been slowed in the city fighting, but the NRA's losses were in the hundreds of thousands. Gone were its best officers, half of the air corps, and most of its tanks and artillery. Meanwhile, the Kwantung Army in the north had seized Beijing and Inner Mongolia.

Chiang Kai-shek's options were all poor. With the national armed forces in disarray and the IJA on the march, on 1 December the Kuomintang abandoned its capital Nanjing, known to Europeans as 'Nanking', and relocated to Chongqing. The NRA general left behind to defend Nanking, Tang Shengzhi, had the manpower at his disposal but not the will or strategy to block the oncoming IJA. Nanking fell and its inhabitants were at the mercy of the IJA. What followed was a grim and baffling period that still echoes down the years to haunt Japan.

THE RAPE OF NANKING

From 13 December until the end of January the following year, foreign missionaries and members of the diplomatic community witnessed wanton arson and looting by Japanese soldiers in Nanking. A week before, the retreating Kuomintang had tried to destroy any structure of value, lest these be captured by the IJA. Now, entire neighbourhoods were razed to the ground and civilians found themselves being rounded up.

"IT WAS CALLED 'SEISEN' AND IN ITS NAME HELL WAS BROUGHT TO MILLIONS OF INNOCENTS"

Soon the killing began. What has astounded historians since is that the atrocities perpetrated in Nanking had no precedent and seemed to have little purpose other than to inflict cruelty on its citizens. The earliest testimonies on Nanking during the first two months of Japanese occupation come from two unlikely American conspirators, Reverend John Magee and George Fitch, the head of the local YMCA. Together they smuggled 16mm footage out of China. The footage captured Japanese atrocities in and around the International Safety Zone, where the foreigners vainly tried to save as many as they could.

It was brave but futile. Constantly harassed by the Japanese, Fitch and a small group of foreigners, including the heroic German ambassador John Rabe, bore witness to the IJA's revenge on Nanking. Fitch kept a journal of his experiences. Just four days after the IJA stormed the city, mass rapes were routinely perpetrated. "Over 100 women that we knew of were taken away by soldiers," Fitch wrote. "Refugees were searched for money and anything they had on them was taken away, often to their last bit of bedding... It was a day of unspeakable horror."

In 1937, a new concept began to circulate in Japanese newspapers and radio broadcasts. It was an attitude, a national mindset, which would justify a long war with an unyielding enemy. It was called 'Seisen' and in its name hell was brought to millions of innocents. But just what did the IJA accomplish in Nanking?

There was no strategy to the slaughter. Men young and old were rounded up on the assumption they were Chinese soldiers in disguise and either shot to death, machine gunned, or bayoneted. Accounts of mass immolation also trickled out from survivors.

Fitch recalls the story of a Chinese man he tried to save. "He was one of a gang of some hundred who had been tied together, then gasoline was thrown over them and set fire. Women were fair game. Japanese soldiers

would break into homes, steal anything of value they could find, and then take turns raping them. Sometimes the women were killed, sometimes not. Eight days before Christmas Eve 1937, Fitch wrote: "A rough estimate at least would be 1,000 women raped last night and during the day."

"One poor woman was raped 37 times," he added. "Another had her five-month-old infant deliberately smothered by the brute to stop its crying while he raped her." On 27 December, he wrote: "A car with an officer and two soldiers came to the university last night, raped three women in the premises and took away one with them." On 30 December there were "three cases of girls 12 or 13 years old either raped or abducted". Finally, on 11 January, Fitch's diary notes: "I have written this account in no spirit of vindictiveness. War is brutalising."

There are no exact figures of civilian deaths in Nanking, or even deaths from the surrounding countryside – the Japanese burned every village in the capital's outskirts. The numbers that have endured are largely estimated statistics. Allowing for a bare minimum of 50,000 civilians killed would mean that the IJA murdered at least 1,200 men and women every day for six weeks. However, the number could easily be as large as 300,000, meaning the rate of murders by bayoneting, beatings, execution and decapitation takes on an unimaginable horror. What cannot be denied or cast in doubt was the scale of Japanese brutality. Aside from the 16mm film that Fitch smuggled in his overcoat to Shanghai and then to the US with the help of Magee, photographs survive of mutilated corpses, pyramids of severed heads, of women stripped bare and taken for trophies.

The IJA also looted Nanking, but the value of this wealth has been forgotten by history. In the face of this carnage, the mistaken bombing of the gunboat USS Panay that killed two Americans and an Italian journalist is understandably a footnote. For this incident the Japanese government apologised and paid reparations.

THE END OF THE BEGINNING

After the atrocities at Nanking, the war raged on, with China's generals always miscalculating and bungling their operations despite foreign aid and expertise. In August 1939, the IJA embarked on its last northern adventure. The goal was the same as before, to expand the boundaries of Manchukuo. But the consequences were dire.

In a place the Soviets called Khalkhin Gol, whole IJA divisions were encircled and wiped out by a methodical combined arms operation that was led by a certain former cavalryman named Georgy Zhukov. The Japanese soldiers, tough as they were, found themselves outfought.

Simply put, the Soviets had better artillery, more tanks, and a lethal new doctrine that annihilated infantry formations. After the battles of Khalkhin Gol, also known as Nomonhan, the IJA had no stomach to fight the Soviets. Manchukuo and the Kwantung Army's fate was sealed on 9 August 1945 when two great pincers of the Red Army crushed the last hope of Imperial Japan.

However, 1937 remains the year when the curtains were first drawn wide open and the stage of the last century's most catastrophic period was set. What followed was a conflagration none of the belligerents could possibly have imagined.

■ Soviet forces at Khalkhin Gol



■ Bodies of victims stack up on the bank of the Qinhuai river, near Nanking's west gate



■ Vocal isolationist Charles Lindbergh gave a speech to members of the America First Committee against US entry into World War II on 10 May 1941

WHY DIDN'T THE US GET INVOLVED IMMEDIATELY?

FOR TWO YEARS, WHILE SWATHES OF EUROPE FELL TO THE NAZIS, ISOLATIONIST AMERICA FOLLOWED A POLICY OF NEUTRALITY

WORDS BY DAVID CROOKES



War in Europe had been coming for some time. Throughout the 1930s, the Nazi Party, led by Adolf Hitler, had come to control Germany ever more tightly, and the country's ambitions were being laid bare with the remilitarisation of the Rhineland,

the incorporation of Austria (Anschluss) and the partition of Czechoslovakia.

Britain was certainly aware of the potential consequences as Prime Minister Neville Chamberlain sought an agreement with Hitler, prematurely declaring "peace for our time" on 30 September 1938. The United States, however, was officially neutral. It had chosen a

path of isolationism, with American politicians loathe to directly intervene.

World War I had proven costly for America and the despair of the Great Depression, which had begun in 1929 and lasted until the late 1930s, was all too fresh in collective minds. Many believed that the hundreds of miles of ocean either side of the US would offer



“IN MAY AND JUNE 1940 THE SITUATION TURNED ON ITS HEAD AS THE GERMANS GAINED MORE SPEEDY VICTORIES”

sufficient protection: surely terror would not land on their doorstep, so why get involved?

In order to make it clear that the United States would not entangle itself once more in foreign conflicts, a series of Neutrality Acts were signed into law from the mid 1930s. The acts would prevent arms and war materials being traded with countries involved in conflict, extend to loans and credits and prohibit American ships from sending items or passengers to any of the belligerents.

Even so, President Franklin D Roosevelt was of the opinion that the US should come to the aid of its allies should they require help. The waters had already been tested in July 1937 when Japan invaded China and invoked the Second Sino-Japanese War. Since there had been no formal declaration of war, Roosevelt had positioned America on the side of the Chinese and, in not making use of the Neutrality Acts, allowed British ships to transport American arms to China.

This caused alarm and anger among the isolationists, who believed it would be better for the US to build up its own defences. It also angered the Japanese. But it was clear which side the US would favour should it enter the war. Roosevelt had already publicly condemned the Nazi Government and opposed Japanese, Italian and German aggression. The president – who would refer to isolationists as ‘shrimps’, crustaceans possessing a nerve cord but no brain – also felt sympathy with those who felt the United States should intervene.

Nevertheless, on 3 September 1939, two days after Hitler’s forces invaded Poland from the air and on land (and on the day Britain declared war on Germany), Roosevelt gave a speech. “This nation will remain a neutral nation. But I cannot ask that every American remain neutral in thoughts as well.”

He added that conflicts elsewhere did affect America’s future. Britain sought to encourage

the US to get involved in its own subtle way, but it wasn’t easy. The country still owed the US money following World War I, and British activity abroad was not always viewed favourably. A heavy-handed approach – given some isolationists blamed Britain for dragging the US into World War I – could have backfired, but there was a gradual thawing in attitude.

By 21 September 1939 Roosevelt was staking the case for a revision of US neutrality law. It led to a series of heated debates and an agreement on 4 November – in the guise of the Neutrality Act of 1939 – that allies could buy American armaments and munitions in cash and transport them on non-US ships. In May and June 1940 the situation turned on its head as the Germans gained more speedy victories, causing serious concern that a Nazi Europe would become an eventual threat.

Still, many remained critical of intervention, among them American aviator Charles Lindbergh, who was a particularly vocal advocate for non-intervention. On 19 May 1940, he took to the radio to make the case for isolation, saying the US would only be invaded if “American people bring it on”. He was certain there would not be an invasion by foreign aircraft and that foreign navies would also stay away from US shores.

Then, on 26 May 1940, Roosevelt delivered a fireside chat to the nation. He said America needed to bolster its defence but with an election looming, he still pledged

America would not become directly involved in the war. Britain, meanwhile, continued to exert some pressure, granting US foreign correspondents access to raw photos of the effects of the war, for instance, in a bid to gain sympathy among the American people.

Following his victory at the polls, Roosevelt was better placed to act, and he looked to supply the UK, France and China with food, oil and military materiel without direct payment – still neutral but leaning to one side. That policy manifested itself as the Lend-Lease Act of March 1941, and the US Navy would come down even further on the side of the Allies by bombing Axis war vessels six months later. The interventionists had won, but the US would soon be in even greater conflict.



ENTER THE AMERICANS

ALTHOUGH IT WOULD TAKE THE ATTACK ON PEARL HARBOR TO PRECIPITATE WAR, THE US NAVY AND KRIEGSMARINE CLASHED THROUGHOUT 1941



Until the Japanese attack of 7 December 1941, the United States had declared a public policy of neutrality. Mindful of the First World War, which American troops had entered in April 1917 and suffered over 116,000 military deaths (from all causes),

a growing call for isolationism resulted in strict laws being created to prevent involvement in any new conflict. The so-called Neutrality Acts of the 1930s severely curtailed American participation in any external conflicts. However, after the outbreak of European war in 1939, various political compromises were reached and aspects of the act repealed to allow the Lend-Lease supply of military equipment and aid to the Allies. The growing cooperation between the United States and Great Britain was further underlined during August 1941, when Churchill and Roosevelt signed what became known as the Atlantic Charter, which set out goals for the post-war world.

By the middle of 1941 a US Navy destroyer group designated 'Support Force, United States Atlantic Fleet' was in operation as part of the American 'Neutrality Patrol' engaged in escorting British convoys to and from a mid-Atlantic meeting point at around the 55th meridian. Inevitably this led to clashes with U-boats as the difficulty of differentiating British and American escort vessels within the Atlantic – and frequently during night attacks – were enormous. On 11 April 1941, after rescuing Dutch survivors of a sunken merchant ship, destroyer USS Niblack attacked what it believed to be a submerged U-boat. Often related as the opening of American-German hostilities, it's likely that no U-boat was present; the contact was either a false echo or whales.

The U-boats' first American merchant ship victim was sunk by U-69 on 21 May 1941, after SS Robin Moor had been stopped, searched and determined to be carrying contraband. Once the crew had abandoned ship, it was sunk by torpedo and artillery fire. In response, President Roosevelt subsequently froze all



ENTER THE AMERICANS

■ *Winston Churchill and Franklin D Roosevelt aboard USS Augusta in Newfoundland during their first face-to-face meeting whereupon they signed the Atlantic Charter*



German and Italian assets within the United States. Several other American merchant ships were sunk over the weeks that followed, while military confrontations escalated.

On 20 June, Kapitänleutnant Rolf Mützelburg aboard U-203 sighted a zigzagging darkened battleship within the declared U-boat 'free-fire' zone between Iceland and Greenland. After identifying the ship, Mützelburg moved to intercept while radioing BdU: "Have sighted US battleship Texas in blockade area. Request permission to fire."

For 16 hours, he stalked the warship, before Dönitz responded: "By order of the Führer, all incidents with United States ships must be avoided in the coming weeks. Until further notice, attacks may not be made on battleships, cruisers, and aircraft carriers unless identified as hostile. Warships steaming at night without lights are not necessarily hostile."

The order from Berlin frustrated Dönitz as well as his U-boat commanders. At a time when they needed to concentrate all available power against the Atlantic trade routes, they were prevented from attacking their most dangerous opponent, the convoy escort, unless certain of nationality. Simultaneously, after American forces relieved British occupation troops in Iceland – an important convoy escort staging point – in July 1941, the frequency of encountering US Navy vessels dramatically increased.

THE UNDECLARED WAR

During September 1941, USS Greer, en route from Argentina to Reykjavík with mail, received British aircraft warnings of a nearby U-boat; having established sonar contact, the US destroyer began to pursue U-652 from close range. The prowling British bomber dropped four depth charges on the estimated location of Oberleutnant zur See Georg-Werner Fraatz's boat who, in the mistaken belief that the destroyer had fired and misidentifying her as one of 50 old American destroyers that had been transferred to Allied control, fired a single torpedo. Though it missed, the ensuing cat-and-mouse battle lasted for two hours, in which USS Greer dropped 19 depth charges and U652 fired a second torpedo that also missed. This inconclusive duel eliminated all doubt that the US Navy and Kriegsmarine were on opposing sides. President Roosevelt publicly declared that the U-boat attack on the Greer was an act of 'piracy' and issued orders that the US Navy would 'shoot-on-sight' any German or Italian ships found within the Pan-American Safety Zone adjacent to the eastern seaboard of North and Central America that he had declared in 1939.

The following month, on 17 October, USS Kearny was torpedoed by Kapitänleutnant Joachim Preuss's U-568. Kearny and three other US Navy destroyers had been summoned to assist the hard-pressed Canadian escort force of convoy SC-48 under attack by U-boats and already having lost ten merchant ships. With Kearny hit on the starboard side, 11 men were killed and 22 wounded, including the captain; the ship reached Iceland under escort by USS Greer for temporary repairs.

■ SS Patrick Henry, the first of the 'Liberty Ships' launched in September 1941



LIBERTY SHIPS

The American flair for mass production that would help turn the tide of war

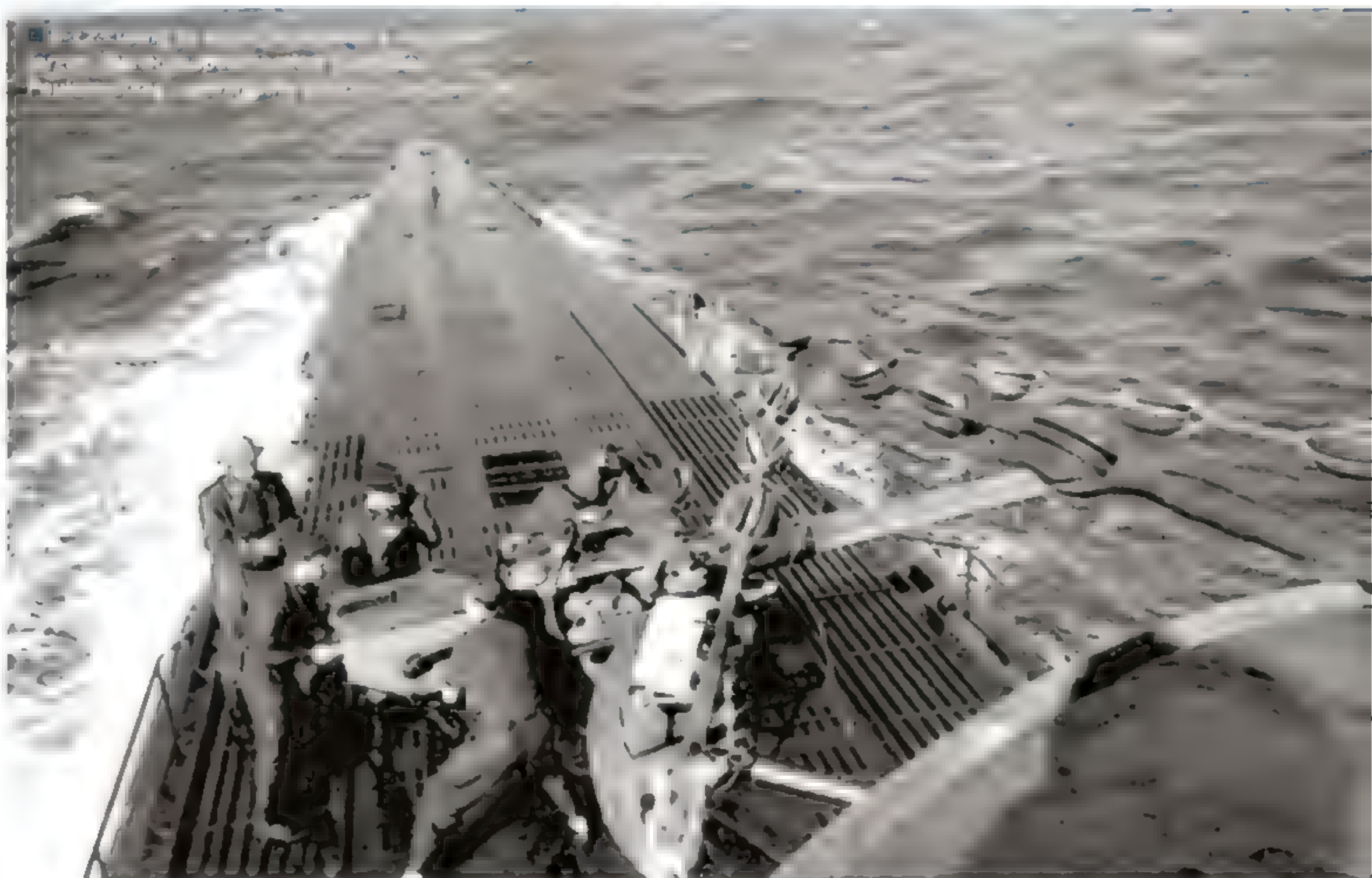
During 1940, Churchill's government ordered 60 Ocean-class merchant ships from American shipyards to help replace those lost to U-boats. Cheap and quick to construct, the first was launched during August 1941. Inspired by the relatively simplistic model, American designers improved the engine and replaced riveted construction with more cost-effective welding. They also instituted the prefabrication of sections that could be transported by rail across the United States and then welded together to form a complete vessel, in the style of assembly-line construction. These American ships were designated Type EC2-S-C1, the 'EC' standing for 'Emergency Cargo', as they were considered a stopgap measure to produce large numbers of replaceable ships.

Roughly standardised to a displacement of approximately 10,000 tons, the first of the EC ships was SS Patrick Henry, which hit the water on 27 September 1941 after 150 days of construction; the shipyard being built alongside the ship itself! That day was known as 'Liberty Fleet Day' as 14 vessels of various types were launched across the United States. President Roosevelt attended the launch of SS Patrick

Henry and within his address to the assembled crowd quoted the ship's namesake orator from the Revolutionary War when he said: 'The Patrick Henry, as one of the Liberty ships launched today renews that great patriot's stirring demand: 'Give me liberty or give me death.' Motivated by his words, it was not long before the EC vessels began to be known as 'Liberty Ships'.

Tapping a vast reservoir of semi-skilled workers, including huge numbers of women, American shipyards began producing Liberty Ships at a prodigious rate; the fastest construction time set by the SS Robert E Peary, launched on 12 November 1942 after only four days, 15 hours and 29 minutes between the keel being laid to launching.

Initially derided as ugly, and not without teething problems caused by structural defects, Liberty Ships – and their successors the Victory Ships – were produced throughout the war years, with many serving well into peace time. The last of 2,710 Liberty Ships to be launched was the SS Albert M Boe on 26 September 1945, while the final Liberty Ship taken out of service was the subsequently diesel-refitted SS Thomas Nelson, which was finally scrapped in 1981.



■ Tanker SS Byron D Benson burning off New Jersey after being torpedoed by U-552 on 5 April 1942



“ROOSEVELT PUBLICLY DECLARED THAT THE U-BOAT ATTACK ON THE GREER WAS AN ACT OF ‘PIRACY’”

Though this tested diplomatic relations yet further, they did not break. Even the next disaster failed to bring about open warfare. Based in Iceland, destroyer USS Reuben James sailed with four other escorts to join eastbound convoy HX-156. On the last day of October, Kapitänleutnant Erich Topp in U-552 sighted the convoy and closed to attack. Positioned between an ammunition ship and the faint direction finder trace of the nearby U-boat, the American destroyer was hit in the forward magazine by a torpedo meant for the merchant; the bow blown off and sinking immediately, the stern going down five minutes later. Of seven officers and 136 men aboard, only 44 men survived. In every real sense, the US Navy and Kriegsmarine were at war.

DRUMBEAT ON THE AMERICAN COAST

Following the ‘day of infamy’ at Pearl Harbor, 7 December 1941, it took only four days for Hitler to declare war on the United States in accord with the spirit of the Axis Triple Alliance. Germany was now in conflict with one of the world’s strongest industrialised nations. While the Wehrmacht would be bled dry in the expanse of the Soviet Union, it now faced the virtually

untapped resources of the United States in intercontinental war.

All restrictions on U-boat operations within the Pan-American Safety Zone were removed and Dönitz envisioned a ‘truly spectacular blow’ mounted by 12 long-range Type IX U-boats. However, Kriegsmarine command in Berlin authorised the use of only six, much to his chagrin. In the event, with U-128 in need of urgent repairs, only five boats – U-66, U-109, U-123, U-125 and U-130 – sailed from France for Operation Paukenschlag (Drumbeat), which stationed attacking U-boats between Nova Scotia and North Carolina. A secondary supporting assault by smaller Type VIIC U-boats against Canada was also scheduled, but it was Paukenschlag that harvested a terrific toll within American waters after U-123 opened the offensive by sinking SS Cyclops on 11 January. With U-123 having pre-empted the scheduled opening of the planned offensive, it was U-130 Korvettenkapitän Ernst Kals who made what he called ‘an attack on the first drumbeat’ and torpedoed Norwegian freighter SS Frisco at the mouth of the Gulf of St Lawrence on 13 January 1942. Paukenschlag had begun.

By the beginning of February, the first five U-boats to operate against the North American coast were low on fuel and heading home.

They had sunk 25 ships totalling 156,939 merchant tons. The greatest successes had been achieved in United States coastal waters where merchant ships sailing individually at night were frequently silhouetted against the undimmed lights of the east coast. For U-boat commanders accustomed to hunting darkened convoys, it was a veritable bonanza of easy targets. Those allocated Canadian waters found the going more difficult against a country that had been on a war footing since 1939. However, when combined with the wave of Type VIIIs that joined the Canadian fray, by the beginning of February, 41 ships had been sunk in North American waters. Dönitz could only wonder what he could have achieved if he had been given the 12 boats that he had wanted for ‘Paukenschlag’.

TORPEDOES AMID THE PALM TREES

The opening of war against the United States also brought U-boats to the Caribbean Sea and Gulf of Mexico, hunting for oil tankers. U-boats of the Operation Neuland group breached the Caribbean; Kapitänleutnant Albrecht Achilles mounting a spectacular attack on Trinidad when he took U-161 surfaced through treacherous reefs into Port of Spain harbour on the night of 19 February. There he torpedoed two tankers before escaping surfaced under the noses of shore batteries and frantic patrol craft with navigation lights blazing. In total, he sank five ships and damaged four more before a triumphant return to Lorient, where he was celebrated as ‘The Ferret of Port of Spain’.

By the end of the Neuland group’s Caribbean onslaught, they had sunk 41 ships, 18 of them tankers. Compared to Paukenschlag, the Caribbean boats had destroyed over 70,000 tons more merchant shipping. The shooting season, however, would not last indefinitely, though the US Navy was undoubtedly slow to adapt to its new war footing. Admiral Ernest King, the highly capable commander-in-chief, United States Fleet, was an outspoken Anglophobe. His personal dislike of everything British certainly influenced American refusal to accept advice from the Royal Navy such as the institution of blackout regulations on the eastern seaboard or convoying of coastal merchants. However, a lack of escort vessels also hamstrung King as his forces were already stretched within other areas of the Atlantic. The US Navy and Coast Guard were instead ordered to perform ASW missions; missions so regular and predictable that U-boat commanders brushed them off. Not until May 1942 did King institute merchant convoys along the east coast and the tide swung once more against the U-boats.

Germany was now in a race to dominate the Soviet Union and Britain before the huge material reserves of the United States could be brought to bear against it. Though many within the United States felt the Pacific war of greater priority, Roosevelt had committed to a policy of ‘Germany First’ and soon American factories were producing huge quantities of weapons for rapidly expanding military forces, and shipyards began to hum with productivity. A sleeping giant had awoken.

HARBOURING A LONG HISTORY

PEARL HARBOR'S INTRIGUING PAST IS NOT LIMITED TO THE EVENT THAT SPARKED THE UNITED STATES' ENTRY INTO WAR

WORDS BY DAVID CROOKES



Pearl Harbor will always be remembered for the events of 1941, but its history stretches back many decades before that fateful and devastating turning point. Indeed, you could go back to Captain James Cook, who was the first Westerner to set eyes on the island of Oahu, Hawaii, when he visited the region in 1778. But way before his explorations, native Hawaiians knew the area as Pu'uloa, which means 'long hill', and the area was steeped in legend.

Oahu, and the bay especially, was said to have been home to two protective sharks: Ka'ahupahau and her brother Kahi'uka. They sought to protect the island, with Pu'uloa believed to be the scene of one of the most fierce battles. It involved heroic Ka'ahupahau turning herself into a net to capture a school of advancing man-eating sharks. The story suggests these predators were brought ashore and left to die, allowing the islanders to live in peace once more.

Luckily Cook, who named the island chain the Sandwich Islands, suffered no such fate, but unfortunately his work eventually brought 'invaders' of a different kind. Although the area was suited to fishing and diving and had become popular for both, outsider attention would later be drawn to the area's potential riches since the shallow bay and its lochs were known for the abundance of pearl-producing oysters that lay upon the bed – a situation that would lead locals to call the area Wai Momi (or Waters of Pearl).

Anyone who came by ship, however, would moor at Honolulu Harbor, discovered by Captain William Brown of Great Britain in 1794. Pu'uloa's entrance was obstructed by a coral reef and the waters were also shallow so American ships would head to Honolulu, particularly in the 1820s, as interest in the

Hawaiian Islands grew thanks to greater shipping, trading and whaling activity.

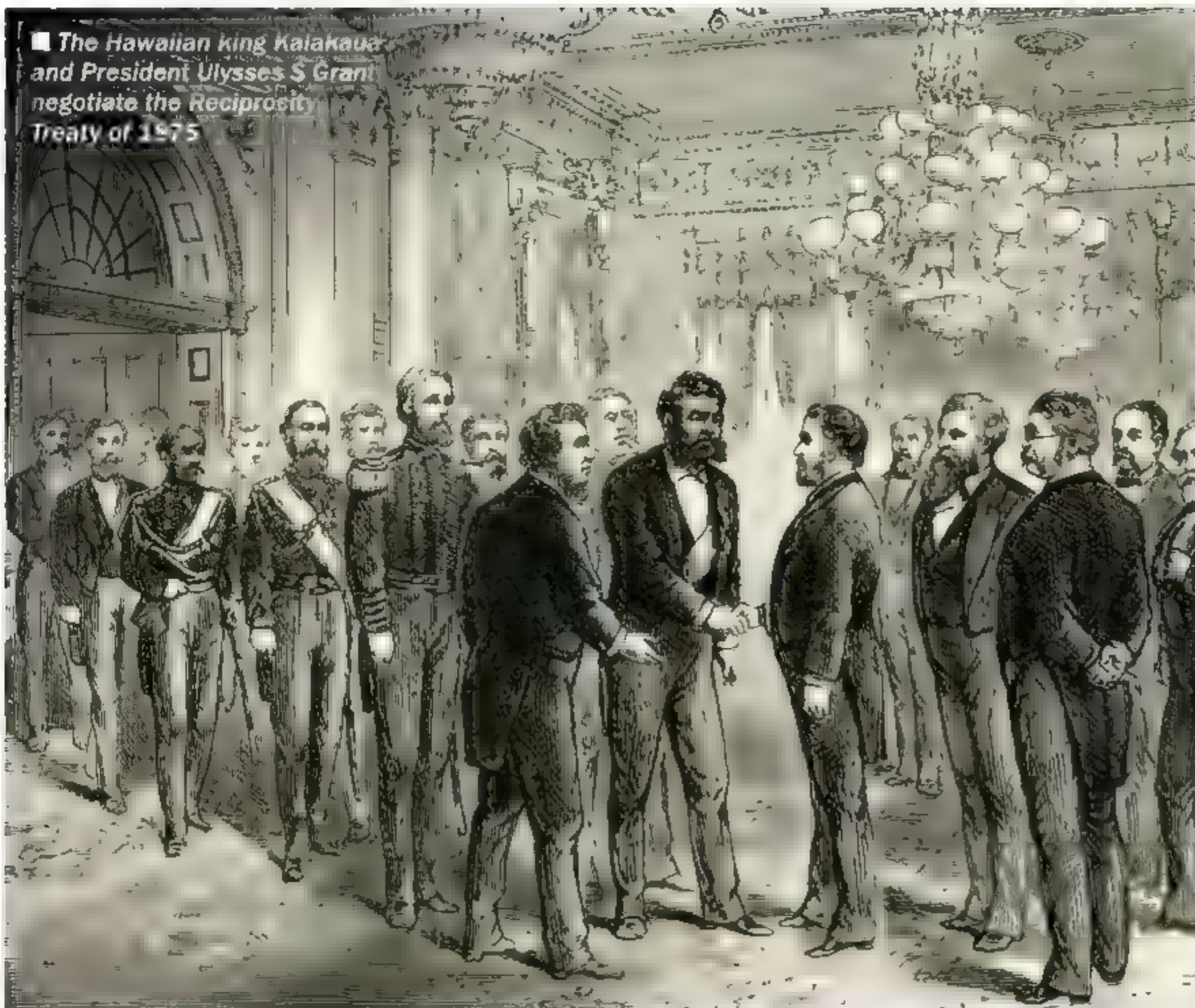
As a result, the town of Honolulu rapidly expanded at this time as businesses and shops opened in support of whaling. It became a focal point for merchant ships that travelled between North America and Asia and it not only put the settlement well on its way to becoming Hawaii's largest city, but also led to John Coffin Jones Jr being appointed an agent of the United States for Commerce and Seamen on 19 September 1820 as America sought to better represent and protect its businesses.

Jones Jr was an advocate for commercial interests but he didn't enjoy much support from Washington, DC, and his work often clashed with the efforts of Christian missionaries. But it was during his time on the islands that the US Navy visited Hawaii for the first time, with the

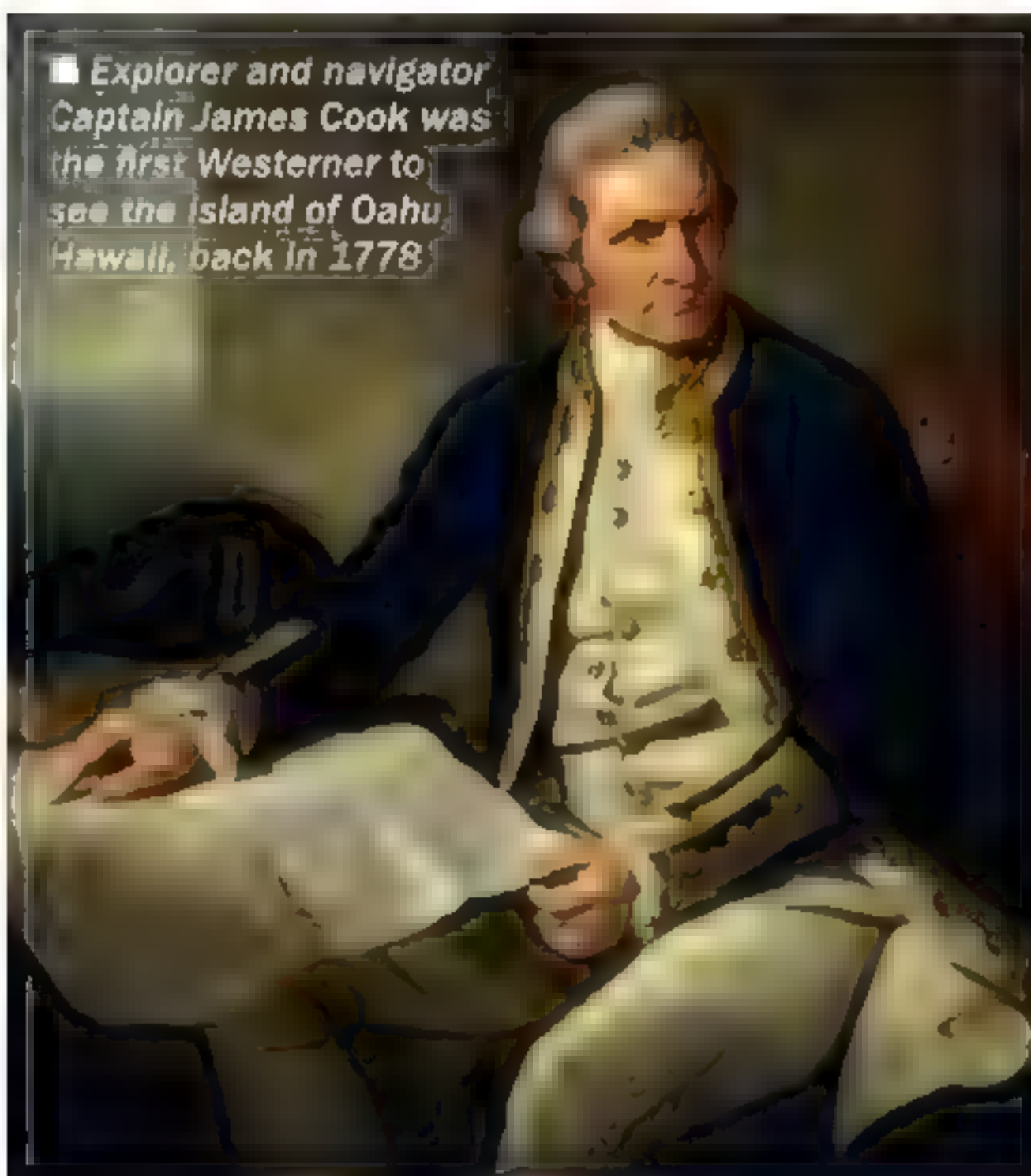
"THE TOWN OF HONOLULU RAPIDLY EXPANDED AT THIS TIME AS BUSINESSES AND SHOPS OPENED IN SUPPORT OF WHALING"



■ A view of Luke Field – later known as Ford Island – taken from the air by a US Army Air Service aviator



■ The Hawaiian king Kalakaua and President Ulysses S. Grant negotiate the Reciprocity Treaty of 1875



■ Explorer and navigator Captain James Cook was the first Westerner to see the island of Oahu, Hawaii, back in 1778



■ An aerial image of Ford Island at Pearl Harbor snapped around 1930

schooner USS Dolphin seeking to assist men of the wrecked US ship London during a cruise to find the mutineers of the American whaler Globe. That was in August 1826 – the year the US signed a treaty to recognise Hawaiian independence – although it wasn't until 1840 that Pu'uloa was identified as a potential naval base by the US (along with Britain and France) following a geodetic survey by US Navy Lieutenant Charles Wilkes.

By now, a naval presence was deemed to be important around Hawaii in helping to protect US interests in the whaling industry but, in 1843, America, Britain and France agreed they would not compete over the islands. That didn't prevent the US from exerting greater influence, though. American missionary Gerrit P Judd would go on to be appointed into Hawaii's most powerful position by King Kamehameha III, assuming the role of the minister of finance in 1846 after spells as minister for foreign affairs and minister of interior. Although the British and French also held positions, ties between Hawaii and the US government were becoming ever stronger and it was felt that annexation by the United States would eventually happen.

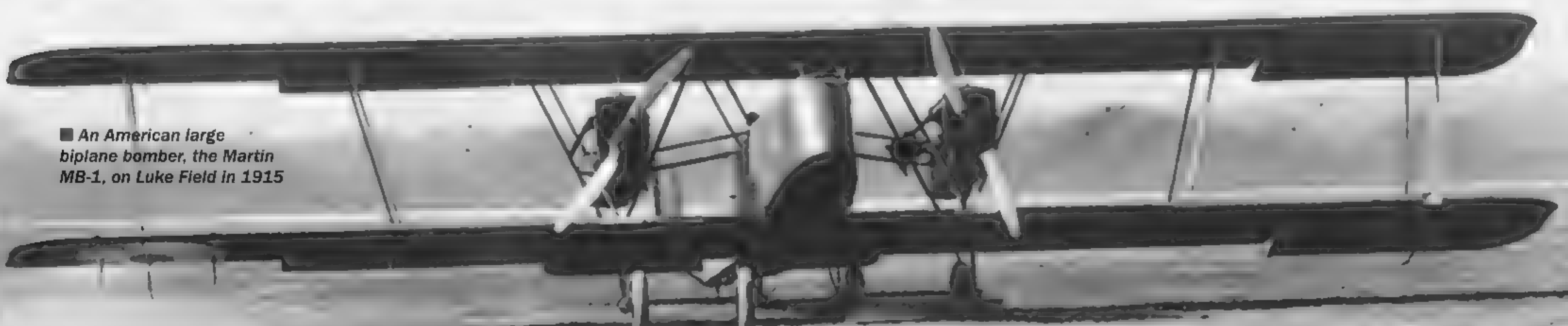
Trade with Asia was now intensifying and it was prudent of the US to foster good relations with Hawaii to better facilitate its ships sailing to and from China. The US would establish diplomatic relations in 1853 when David L Gregg was appointed commissioner to the Kingdom of Hawaii and, while there were unsuccessful discussions about annexation,

it wasn't for want of trying. Indeed, President Abraham Lincoln was ambitious. He appointed James McBride as minister to the Kingdom of Hawaii in 1863 and he kickstarted negotiations with Russia to purchase Alaska. This move increased American trade with East Asia, and Hawaii was becoming ever more crucial.

The 1860s saw an increase in naval activity. The North Pacific Squadron was augmented in 1866 under the command of Rear Admiral HK Thatcher, with the Hawaiian islands forming part of the area of operations. Meanwhile, USS Lackawanna was assigned to the islands for an indefinite period and it led to the formal taking of Midway Island by Captain William Reynolds – the first Pacific island to be annexed by the United States. The idea was to bolster Midway Island's harbour but it was also envisaged that Pu'uloa could be put to better use, too.

Come 1873 and King Lunalilo was elected as the Kingdom of Hawaii's sixth monarch and was duly crowned 'The People's King'. His reign lasted just over a year but he had already explored offering Pu'uloa to the United States as a way of pulling Hawaii out of economic depression – an idea floated by Hawaiian minister of foreign affairs Charles Reed Bishop, who owned a nearby country home.

This was deemed necessary since the once prosperous whaling industry was waning and sugar was seen as the islands' potential saviour. Lunalilo was therefore urged to draw up a treaty that would allow Hawaii's sugar and other products to enter the United States



■ An American large biplane bomber, the Martin MB-1, on Luke Field in 1915



■ A line-up of US Navy Douglas PD-1 flying boats of patrol squadron VP-6F at Naval Air Station Ford Island, Pearl Harbor in 1934

without duty – banishing the high taxes that were in place at the time. The population, however, was not quite taken by the idea of the lagoon being handed to the US, fearing it would only lead to all of the land being eventually lost and so the idea was dropped, albeit on a temporary basis.

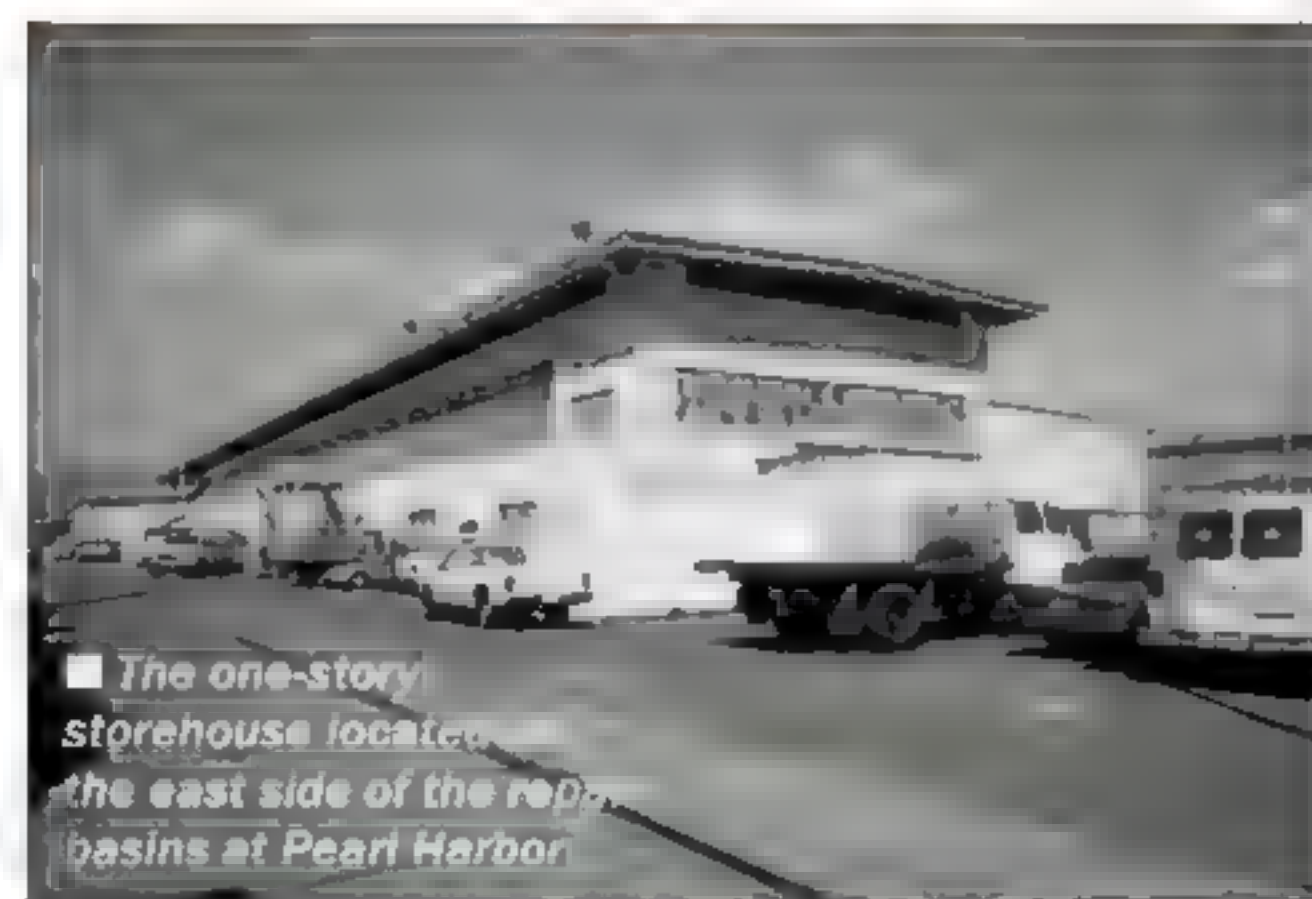
For, in 1875 and following pressure from the US government, a free trade deal was signed and ratified between the United States and the Kingdom of Hawaii under the watch of the new monarch Kalakaua. This manifested itself as the Reciprocity Treaty of 1875 and it built upon the talks Lunalilo had in place, notably the ability to freely sell sugar and other home-grown products tax-free to the American market. With enough land given in return, the US gained the rights to Pearl Harbor for seven years and it gained an extension thereafter.

A key agreement was struck on 6 December 1884, when the United States and the Kingdom of Hawaii signed the Reciprocity Convention, which was ratified three years later. It allowed “the Government of the US the exclusive right to enter the harbor of Pearl River, in the Island of Oahu, and to establish and maintain there a coaling and repair station for the use of vessel of the US and to that end the US may improve the entrance to said harbor and do all things useful to the purpose aforesaid”.

And yet Pearl Harbor did not immediately come into being. It would take a dozen years before consideration was given to properly opening up the entrance by blasting the coral rock and dredging the shallow channel, making it deeper for larger ships. But that came in 1901 as a result of the United States' long-awaited annexation of Hawaii in 1898 and it followed a coup d'état by subjects of the Hawaiian Kingdom, US citizens and foreign residents that had temporarily formed the Republic of Hawaii.

The value of this location soon became apparent during the Spanish-American War that same year. Having coaling stations in strategic locations allowed the US to become a world economic power since it would maintain a means for fuelling its fleets during conflict. Even so, while USS Petrol entered the harbour in 1903, it took until 1908 for Pearl Harbor to finally become a naval station.

By 1913, the US Navy had left Honolulu and



■ The one-story storehouse located on the east side of the repair basins at Pearl Harbor



■ Flying boat maritime patrol aircraft PSYs sit in the waters off Pearl Harbor in 1934





■ Harry Yarnell oversaw an exercise that was known as Fleet Problem XIII – unluckily for the US, his advice went unheeded

THE FIRST ATTACK ON PEARL HARBOR

The Hawaiian base was first targeted in 1932 – by the US itself

For most people, 7 February 1932 is not a date that sits proudly in the mind, but it was the day Pearl Harbor was attacked the first time and not even by an enemy. Rather it was the day of a drill that sought to prepare the harbour for a potential conflict with a militaristic Asian nation – notably Japan. With 152 aircraft dispatched from two aircraft carriers, Rear Admiral Harry Yarnell looked to stage an assault that was not unlike the more famous one around ten years later.

For starters, the mock raid took place on a Sunday morning. It also happened from a north-northeast direction. Rather than announce the simulation, Yarnell figured the Japanese would seek to surprise and he targeted the airfields before going for the ships. White flour littered the ground rather than bombs and Yarnell was proclaimed victor.

Unfortunately, upon later reflection, Yarnell was thought to have acted in a way that differed from the mindset of the Japanese, and the powers-that-be therefore believed Pearl Harbor was not vulnerable to such an attack. It would prove to be a naïve assessment given the almost carbon-copy approach later taken and so it became a learning opportunity that was woefully lost.



■ An aerial photograph of pre-war Pearl Harbor with the fuel tank farm in the centre middle, the marine barracks left and the harbour entrance in the centre background

“THE US NAVY GREW ITS MILITARY PRESENCE IN THE PACIFIC WITH MORE LOCHS DEEPENED AND LARGER SHIPS COMING THROUGH”

Pearl Harbor became its main port in the Pacific following a continued spell out in Honolulu. Millions of dollars had been poured into creating world-class facilities at Pearl Harbor, with a drydock completed in 1919 after ten years of work, during which time locals believed a shark god was angered – a situation accounting, they said, for why it collapsed during construction, setting the project back some time.

Even so, the US Navy grew its military presence in the Pacific with more channels and lochs deepened and ever-larger ships coming through. A decision to buy Ford Island – an islet in the centre of the harbour – created a base for a newly formed aviation division, the 6th Aero Squadron (taken over by the US Navy in 1939). Meanwhile, housing and major hangars were completed by 1918 together with a

supply warehouse, photo lab, powerhouse and machine shop. The following year the field was named Luke Field.

The 1930s also saw much construction, with new bases added for submarines and planes, and improvements made to the harbour's repair facilities. Indeed, more than \$1.5 million was spent in 1940 on further dredging so that larger fleet carriers and battleships could enter.

By now, the US Pacific fleet had two main homes – San Diego in California and Pearl Harbor – and the United States firmly saw the latter as crucial. It wanted to make sure it was well equipped and ready for all eventualities. As such, in 1940, President Roosevelt moved the Pacific Fleet from California to Pearl Harbor but Japan saw this as a threat. As history will record, Pearl Harbor's defensive capabilities would soon be put to the test.

■ Pearl Harbor's Dry Dock Number 1 opens in 1919 following a decade of work





A PRE-WAR NAVAL BASE

1930s

The Naval Air Station Ford Island on Pearl Harbor in the late 1930s with its runway, completed housing and major hangars. This photograph was taken just a few years prior to the devastation it witnessed at the hands of the Japanese military on the archipelago that lies approximately 2,000 miles from the American mainland and about 4,000 miles from Japan. Its location near the middle of the Pacific Ocean made it a strategic advantage.



STATE OF PLAY: 1941

JAPANESE IMPERIALISM CONTINUES ITS MARCH, CULMINATING IN THE DEVASTATING ATTACK ON PEARL HARBOR



during the late 19th and early 20th centuries, the island nation of Japan undergoes a swift transformation from a feudal society to an industrialised military and economic power. Its burgeoning ambitions to achieve hegemony in Asia and the Pacific,

fuelled in part by the need to obtain natural resources for its military machine and arable land to feed a growing population, place the country on a collision course with American and European interests in the Far East.

Sporadically at war with China since 1931, the Japanese Army controls the province of Manchuria and other Chinese lands. By 1941, France capitulates to Nazi Germany, and Japanese troops occupy French Indochina, placing them perilously close to the oil fields and other natural resources of the Dutch East Indies. President Franklin Roosevelt orders an embargo of oil, scrap iron, machinery, and other commodities to Japan and freezes Japanese assets in the United States. Along with the embargo comes an ultimatum from the United States to withdraw all of the Japanese troops from the Asian continent.

By the autumn of 1941, Japan stands at a political and military crossroads. Prime Minister Hideki Tojo, also a militarist general, leads the nation to war rather than acquiesce to American demands while losing honour and substantial territorial gains. In November, plans for a preemptive naval air strike against the US Pacific Fleet at Pearl Harbor and other military installations in Hawaii, are set in motion, and Japanese planes attack without warning on 7 December, plunging the United States into World War II.





TOJO TAKES CHARGE

General Hideki Tojo, a war-mongering militarist, becomes Prime Minister of Japan on 17 October 1941. Tojo, nicknamed 'Razor', advocates an aggressive policy toward the United States, Great Britain and the Netherlands. He authorises the attack on the US Pacific Fleet at Pearl Harbor and action against British and Dutch possessions in the Far East, initiating World War II in the Pacific.

JAPANESE PUPPET STATE

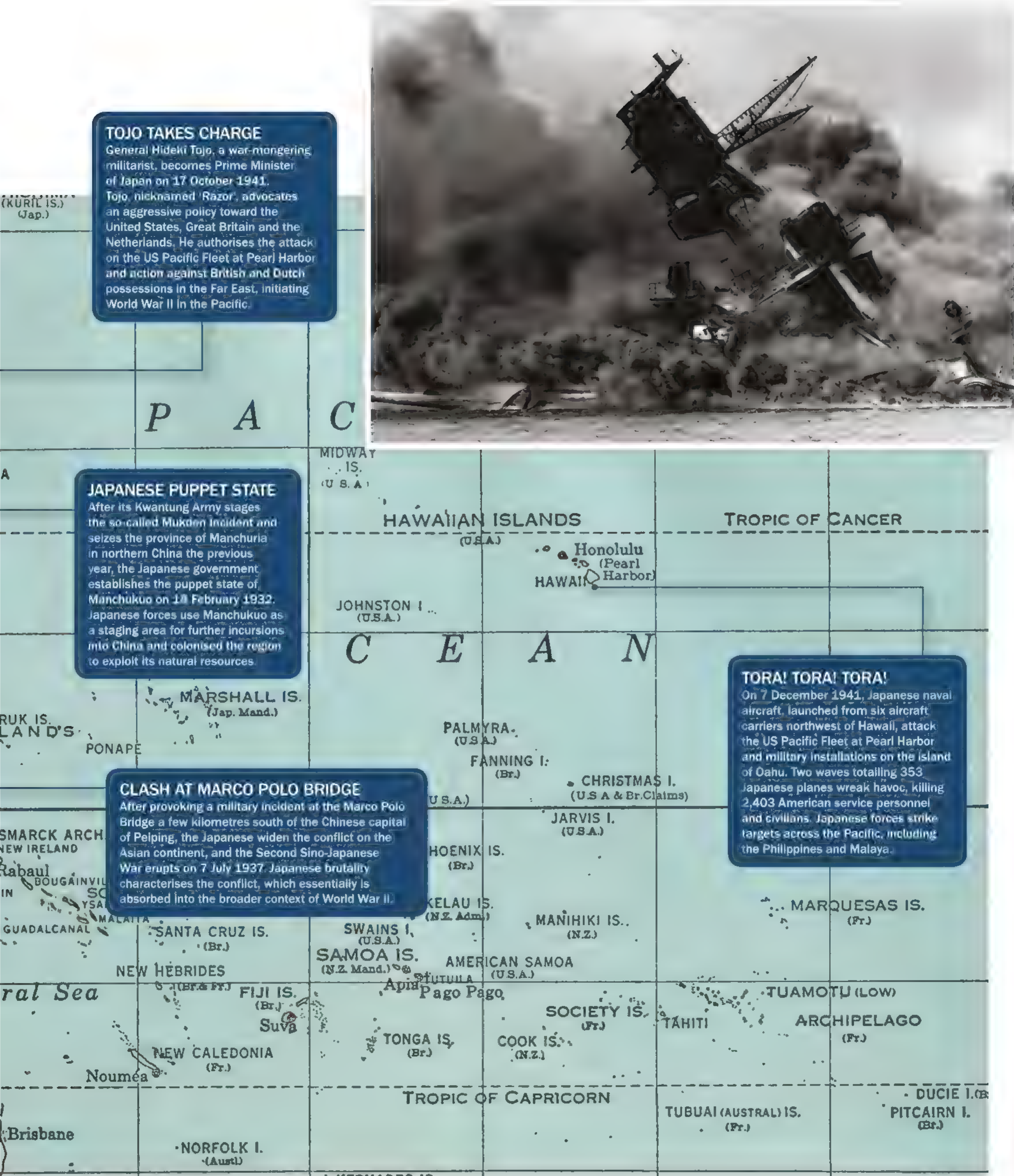
After its Kwantung Army stages the so-called Mukden Incident and seizes the province of Manchuria in northern China the previous year, the Japanese government establishes the puppet state of Manchukuo on 18 February 1932. Japanese forces use Manchukuo as a staging area for further incursions into China and colonised the region to exploit its natural resources.

TORA! TORA! TORA!

On 7 December 1941, Japanese naval aircraft, launched from six aircraft carriers northwest of Hawaii, attack the US Pacific Fleet at Pearl Harbor and military installations on the island of Oahu. Two waves totalling 353 Japanese planes wreak havoc, killing 2,403 American service personnel and civilians. Japanese forces strike targets across the Pacific, including the Philippines and Malaya.

CLASH AT MARCO POLO BRIDGE

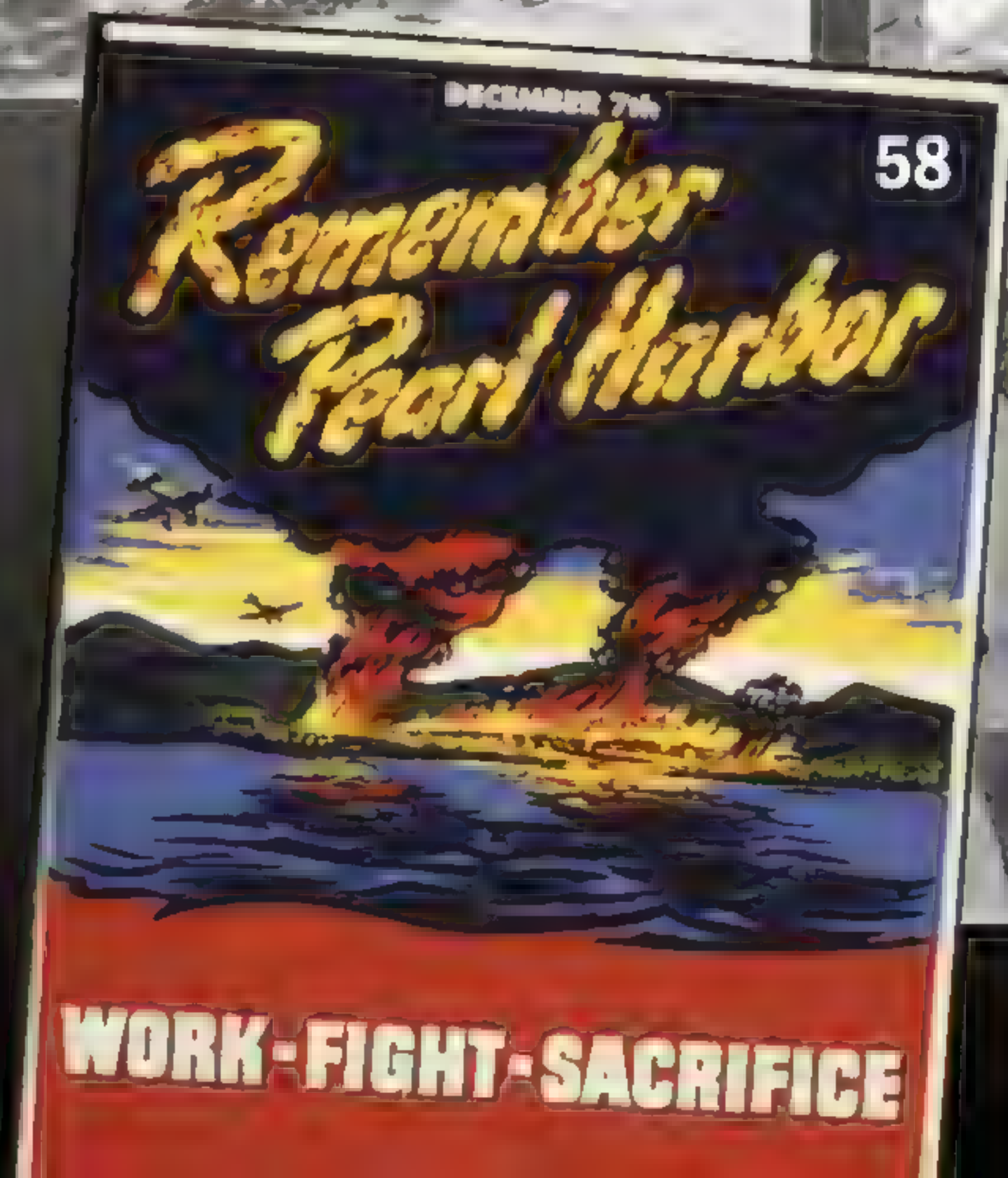
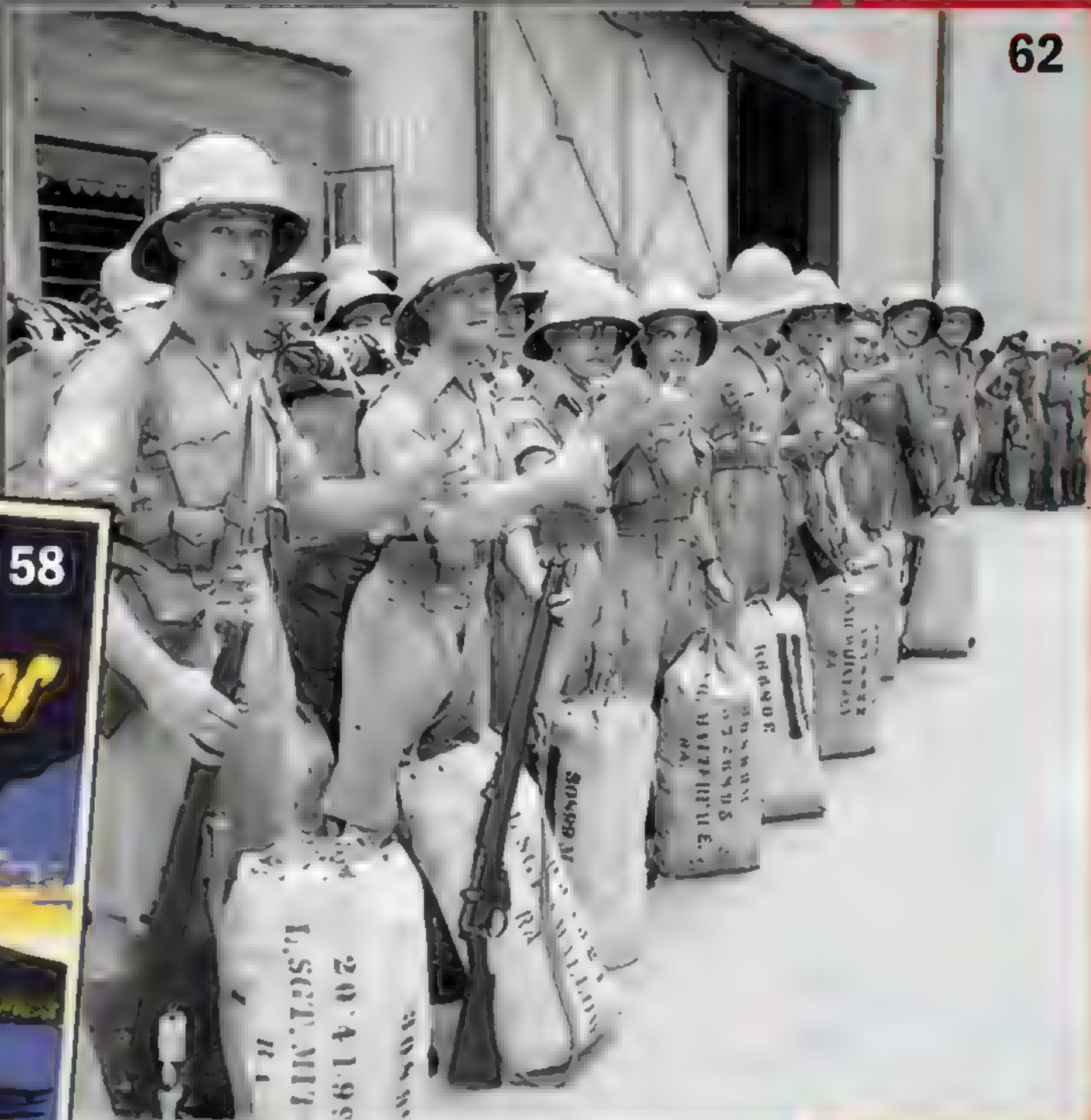
After provoking a military incident at the Marco Polo Bridge a few kilometres south of the Chinese capital of Peking, the Japanese widen the conflict on the Asian continent, and the Second Sino-Japanese War erupts on 7 July 1937. Japanese brutality characterises the conflict, which essentially is absorbed into the broader context of World War II.



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JAPAN'S FIRST STRIKE

IMPERIAL PLANNING AND PREPARATION
FOR THE SURPRISE ATTACK ON PEARL
HARBOR BEGAN MONTHS BEFORE THE
SUNDAY MORNING AERIAL ASSAULT

WORDS BY MIKE HASKEW

**"THE RISE OR FALL OF THE EMPIRE
DEPENDS ON THIS BATTLE. EVERYONE
WILL DO HIS DUTY TO THE UTMOST"**

— ADMIRAL ISOROKU YAMAMOTO, COMMANDER-
IN-CHIEF OF THE COMBINED FLEET





Just before sunrise on Sunday 7 December 1941, six aircraft carriers of the Imperial Japanese Navy's First Air Fleet under the command of Vice Admiral Chuichi Nagumo turned into the wind, ready to launch a powerful striking force of 353 aircraft.

Nagumo's flagship, Akagi, and her consorts, Kaga, Soryu, Hiryu, Shokaku and Zuikaku, set in motion the marauding strike force that would plunge the Pacific into World War II. Its target was the US Navy's Pacific Fleet, which was anchored at Pearl Harbor on the island of Oahu in the territory of Hawaii. Other US Navy and Army installations on the island, Hickam Field, Wheeler Field, Bellows Field, Ewa Marine Corps Air Station, and the naval air stations at Kaneohe and on Ford Island in the heart of Pearl Harbor were to be hit as well.

The opening blow was intended to cripple the American military presence in the Pacific; allow the Japanese armed forces to seize and consolidate strategic gains throughout the region; and bring the United States government to the negotiating table where Japan would dictate favourable terms of an armistice. To

that end, the Pearl Harbor raid was coordinated with attacks on the Philippines, Wake Island, Midway Atoll and Malaya.

The gambit was all or nothing for Japan. Although senior Japanese commanders were confident of swift victory, at least some of them acknowledged that a prolonged war with the United States was a daunting prospect, considering the industrial might and resources at the disposal of their adversary.

Years of rising militarism and imperialism in Japan had placed the island nation on a collision course with the United States, a preeminent power in the Pacific since the Spanish-American War. Japan's provocative military moves on the Asian mainland, particularly the occupation of the Chinese region of Manchuria and later of French Indochina, had brought the two nations to loggerheads. While negotiations were continuing, most observers on either side of the Pacific believed war was inevitable.

THE BRITISH INFLUENCE

At 9pm on the evening prior to the Pearl Harbor attack, Nagumo ordered all hands aboard the

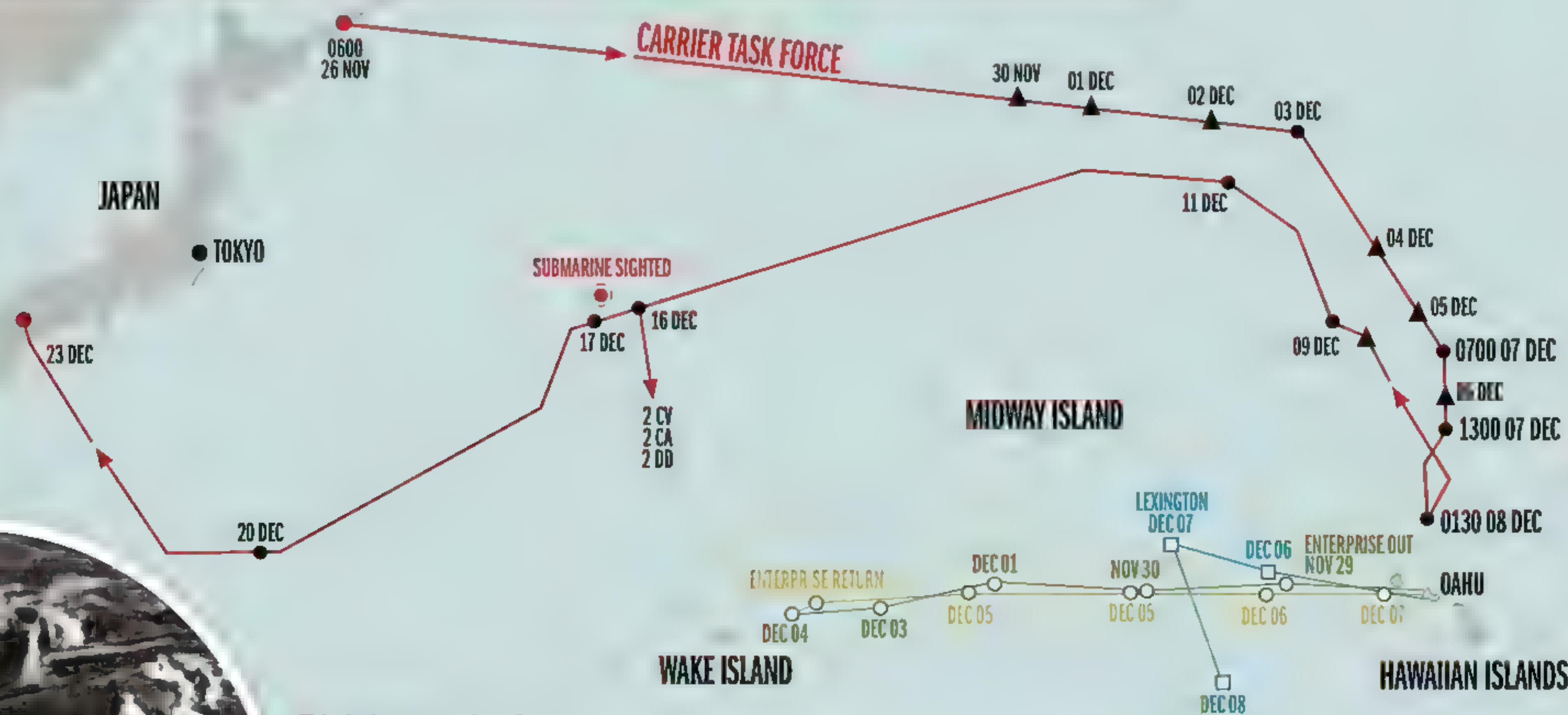


■ Vice Admiral Chuichi Nagumo led the First Fleet during the Pearl Harbor operation, but later lost his command.

"YEARS OF RISING MILITARISM AND IMPERIALISM IN JAPAN HAD PLACED THE ISLAND NATION ON A COLLISION COURSE WITH THE UNITED STATES, A PREEMINENT POWER IN THE PACIFIC"

JAPANESE RAIDER ROUTE

The six Imperial Japanese Navy aircraft carriers and their escorting ships of the First Air Fleet departed the friendly waters of the Kurile Islands on 26 November 1941, sailing a northern route well away from standard merchant shipping lanes and maintaining strict radio silence. Rough seas and intermittent heavy rain cloaked the warships at times as they turned southeast towards a point 370 kilometres north of Oahu to launch the aerial strike force that devastated Pearl Harbor on 7 December.



■ Left: Japanese aircraft prepare to take off from the carrier Shokaku during the second attack wave



IMPERIAL WAR MACHINES

The Japanese armed forces employed the latest technology available during the opening phase of World War II in the Pacific

MITSUBISHI A6M ZERO FIGHTER

For a time, the Mitsubishi Zero reigned supreme as the finest carrier-based fighter aircraft in the Pacific. Developed in the 1930s, it was already reputed as a highly manoeuvrable, heavily armed and deadly opponent by the time of the Pearl Harbor attack. However, the Zero was also vulnerable. Its design sacrificed armour and self-sealing gasoline tanks to achieve remarkable performance.

ENGINE

Its two-row, 12-cylinder Nakajima Sakae radial engine provided the Zero a top speed of 534 kilometres per hour.

WEAPONS

The Mitsubishi Zero was armed with 7.7mm machine guns firing through the engine cowl and 20mm cannon in its wings.

NAVIGATION

For navigation, Japanese midget submariners depended heavily on instruments and a carefully deployed periscope extending from the small conning tower.

MIDGET SUBMARINE

Two-man Japanese midget submarines were developed to provide stealthy offensive capability. Amid cramped quarters, crewmen manoeuvred their craft, armed with a pair of torpedoes, into position to fire on enemy ships. At Pearl Harbor, all five midget submarines were lost. One was captured intact after it beached and its commander became the first prisoner of the Americans during World War II.

TORPEDOES

Japanese midget submarines carried a pair of lethal torpedoes that protruded from the tubes located in the small submersible's bow.

"AT PEARL HARBOR, ALL FIVE MIDGET SUBMARINES WERE LOST"

AIRCRAFT CARRIERS

At the time of Pearl Harbor, the modern aircraft carriers of the Imperial Japanese Navy included converted battlecruisers Akagi and Kaga, along with those built from the keel up, such as the smaller Soryu and Hiryu. The newest fleet carriers were the Shokaku and Zuikaku, both displacing more than 26,000 tons and carrying more than 80 combat aircraft.

MODIFICATIONS

Japanese aircraft carriers were often modified and upgraded during experimentation to enhance flight operations, including constructing or relocating their islands.

HANGAR DECKS

Japanese crewmen laboured on hangar decks to prepare planes for combat, moving them to flight decks for launch via elevator.

Akagi to attention. He solemnly read a message from Admiral Isoroku Yamamoto, commander-in-chief of the Combined Fleet: "The rise or fall of the empire depends on this battle. Everyone will do his duty to the utmost."

Yamamoto meant the communication not only as an encouragement to the Japanese sailors and airmen, but also as homage to naval esprit de corps. During the decades preceding World War II, the Imperial Japanese Navy had embarked on a lengthy program of expansion, modernising and modelling itself on the finest naval tradition in the world – the British Royal Navy. The message from Yamamoto echoed one similarly flashed by Admiral Horatio Nelson, one of the greatest heroes in the history of the Royal Navy, prior to the epic Battle of Trafalgar in 1805.

Japanese respect for the Royal Navy ran deep. Since the turn of the 20th century, some vessels of the imperial fleet had actually been constructed in British and French shipyards, while Japanese training, operational standards, uniforms and rank insignia were similar to those of the British.

Following the outbreak of war in Europe, the Royal Navy again served as a role model for the Japanese. On the night of 11 November 1940, Fairey Swordfish torpedo bombers of the Fleet Air Arm flew from the deck of the aircraft carrier



NAVAL AIR JUGGERNAUT

The Japanese Navy observed Western advances in naval aviation and welcomed envoys to consult and train its pilots

The British Royal Navy pioneered many aspects of the development of naval aviation in the early 20th century and Japanese naval observers also recognised its potential.

Intent on emulating the Royal Navy's successes, the Japanese received a British mission headed by Captain William Sempill in the autumn of 1921. Sempill led 29 air operations instructors charged with assisting the development of the Japanese naval aviation program. By 1922, the Japanese had also constructed the Hosho, the world's first aircraft carrier

purpose-built, rather than converted from another ship type.

Sempill, who was later exposed as a spy for the Japanese, hoped to secure substantial sales of British arms to Japan in exchange for valuable expertise and advice. His team brought the blueprints of the most advanced British carrier designs, protocols involving elements such as pilot training, the launch and recovery of aircraft, refuelling and maintenance, and airborne operations. The British trained the young Japanese pilots in the latest Royal Navy aircraft

such as the Gloster Sparrowhawk fighter, along with torpedo bombers and dive bombers. They introduced torpedo tactics to the Imperial Navy as well.

Japanese engineers and designers began to experiment with their own ordnance and aircraft, several of which were patterned after British types, and perfected carrier operations and doctrine during the 1920s and 1930s.

Prior to the attack on Pearl Harbor, Lieutenant Commander Takeshi Naito, a naval attaché in Berlin, travelled to the port of Taranto, Italy, where the British had executed a successful attack against the Italian Fleet at anchor in November 1940. With the assistance of the Italian Navy, Naito assessed the dynamics of the Taranto raid and advised the Pearl Harbor planners on modifications to existing tactics. Eventually, wooden stabilising fins were attached to Japanese aerial torpedoes, allowing them to run true in Pearl Harbor's shallow waters.



■ Dive bombers crowd a flight deck prior to Pearl Harbor

■ Below: Type 91 Kai 2 torpedoes on the flight deck of the Imperial Japanese Navy aircraft carrier, Akagi. The carrier is at Hitokappu Bay in the Kuriles just prior to departing for the attack on Pearl Harbor.



"SEMPILL, WHO WAS LATER EXPOSED AS A SPY FOR THE JAPANESE, HOPED TO SECURE SUBSTANTIAL SALES OF BRITISH ARMS TO JAPAN"

HMS *Illustrious* in the Mediterranean Sea and attacked the Italian naval anchorage at Taranto. The 21 obsolescent British biplanes sank one Italian battleship and damaged two others.

For the Japanese, the idea of a preemptive raid on Pearl Harbor had been discussed, tested during war games and shelved several times during the years between the world wars. However, bolstered by the British success, the staff of the Combined Fleet began, in January 1941, to plan for just such a bold stroke. Lieutenant Commander Minoru Genda, one of the best known and most respected aviators in the Japanese armed forces, had observed American carriers operating in a unified, single strike force and attended war games in 1936, during which an offensive scenario against Pearl Harbor had ended in simulated disaster

for the attacker. Still, Genda remained one of a relative few Japanese officers who believed it was possible for a carrier task force to successfully deliver a stunning blow against an enemy fleet at anchor.

As Japanese aircraft carrier strength reached sufficient levels to support a Pearl Harbor attack, Yamamoto instructed Admiral Takajiro Onishi, chief of staff of the 11th Air Fleet, to order Genda to evaluate the potential for success with "special attention to the feasibility of the operation, method of execution and the forces to be used". Yamamoto was reluctant to go to war with the US, but he strongly believed that a substantial and successful first strike at the Pacific Fleet was the only option to bring such a conflict to a rapid and favourable conclusion for Japan.

Yamamoto's assertion that Pearl Harbor should be Japan's target actually reversed traditional thinking at the highest command levels within the Imperial Navy. Although the army had been active on the Asian continent, naval doctrine had previously assumed a defensive posture. In the autumn of 1940, Yamamoto's assertion became an ultimatum. He eventually threatened to resign if senior commanders within the Combined Fleet refused to support the proposal.

THE BLUEPRINTS FOR WAR

By the following August, the basic plan for the Pearl Harbor attack had been approved. The six aircraft carriers of the 1st Air Fleet were to be accompanied by an armada of two battleships, two heavy cruisers, a light cruiser, nine destroyers, three submarines and eight tankers – a total of 31 vessels – sailing from their rendezvous point at Hitokappu Bay in the Kurile Islands. The fleet was to sail on 26 November; take a northerly course, in order to avoid

"THE IDEA OF A PREEMPTIVE RAID ON PEARL HARBOR HAD BEEN DISCUSSED, TESTED DURING WAR GAMES AND SHELVED SEVERAL TIMES DURING THE YEARS BETWEEN THE WORLD WARS"

■ The battleship USS *Arizona* belches black smoke as its superstructure buckles after a devastating explosion during the Pearl Harbor attack



■ A Japanese Mitsubishi Zero fighter roars off the flight deck of the aircraft carrier Akagi en route to Pearl Harbor



■ Photographed ten days after it crashed during the Pearl Harbor attack, the Zero of Petty Officer Shigenori Nishikaichi lies derelict



the busy Pacific trade routes and merchant shipping that plied the ocean; maintain strict radio silence; and launch its aircraft in two waves from a position 370 kilometres north of Oahu. The tentative date for the attack was designated as 7 December 1941.

A cordon of fleet submarines was positioned around Oahu to provide early warning of any American ship movements and attack any American naval vessels that might be at sea near the harbour. Five midget submarines were to be launched from their mother submarines hours before the aerial attack, with the hope that they might infiltrate Pearl Harbor and launch torpedoes at anchored vessels of the Pacific Fleet.

Early in September, senior Japanese officers convened at the Naval War College in Tokyo and finalised the plans for the attack. One month later, senior pilots who would assume command of air groups were informed of the target against which they had been training so rigorously. They already had some idea of its nature, since the torpedo groups had worked to perfect their runs against capital



After a mission in the Solomon Islands, Aichi D3A Val dive bombers return to the aircraft carrier Shokaku

“A CORDON OF FLEET SUBMARINES WAS POSITIONED AROUND OAHU TO PROVIDE EARLY WARNING OF ANY AMERICAN SHIP MOVEMENTS AND ATTACK AMERICAN NAVAL VESSELS”

ships anchored in shallow waters. Combined Fleet Top Secret Operational Order No 1 was issued on 5 November, followed 48 hours later by Order No 2, authorising the fleet to weigh anchor at the end of the month and to execute the attack on Pearl Harbor.

When the fleet set sail, Admiral Kichisaburo Nomura and Special Envoy Saburo Kurusu were in Washington, DC, conducting last-ditch negotiations with Secretary of State Cordell Hull and President Franklin D Roosevelt. These negotiations were expected to fail, and when the impasse was reached, specific orders to launch the attack would be issued to Nagumo at sea. At the same time, the envoys, oblivious to the details of the Pearl Harbor attack, were instructed to deliver a message to the US government, officially terminating the negotiations. The government in Tokyo considered this diplomatic step essentially a declaration of war, timed for a half hour before the Japanese aircraft appeared in the sky above Pearl Harbor.

Lieutenant Commander Mitsuo Fuchida, leader of the air groups of the 1st Air Fleet, was assigned the task of allocating aircraft to specific targets, organising the two waves of planes to coordinate their attacks and allotting fighter protection against any American planes that might make it into the sky and attempt to fight back. Fuchida assigned 185 aircraft to the first wave. It consisted of 49 Nakajima B5N ‘Kate’ bombers carrying armour-piercing bombs, 40 Kates with aerial torpedoes, 51 Aichi D3A ‘Val’ dive bombers with general purpose bombs and 45 superb Mitsubishi A6M Zero fighters to provide escort and strafe targets of opportunity.

While the Kates hit the warships anchored in Pearl Harbor, 25 Vals were designated to blast the primary American fighter base at Wheeler Field. 17 Vals were assigned to destroy Ford Island’s patrol plane and fighter base and nine were to strike American bombers based at Hickam Field. The second wave included 54 Kates armed with 550 and

125-pound bombs to demolish installations and crater runways at the airfields, 80 Vals with 550-pound bombs to renew the attacks on the warships in the harbour and 36 marauding Zeroes.

Fuchida received an intelligence message from a Japanese spy on Oahu the day before the attack was launched. It was tinged both with optimism that the element of surprise would be achieved and disappointment that the three American aircraft carriers, Enterprise, Lexington and Saratoga were not present at the anchorage. It read: “No balloons, no torpedo defence nets deployed around battleships in Pearl Harbor. All battleships are in. No indications from enemy radio activity that ocean patrol flights being made in Hawaiian area. Lexington left harbour yesterday. Enterprise also thought to be operating at sea.”

The USS Saratoga was steaming into the harbour at San Diego, California, when the Japanese attackers arrived above Pearl Harbor on 7 December. Although the aircraft carriers were absent, there was no turning back. The attack had to proceed as ordered and the Japanese rationalised that the remaining targets, particularly the US battleships, were high value enough to justify the risk being undertaken.

KEY PLAYER: ISOROKU YAMAMOTO

MORE THAN ANY OTHER INDIVIDUAL, YAMAMOTO WAS RESPONSIBLE FOR SHAPING THE PRE-EMPTIVE STRIKE ON PEARL HARBOR



Isoroku Yamamoto was born as Takano Isoroku on 4 April 1884 in Nagaoka, in the Niigata Prefecture on the west coast of Honshu. An above average student, Isoroku entered the Japanese Naval Academy in 1900 and, after graduating, went to sea during the Russo-Japanese War.

The following decade, his life began a steep upward trajectory when in 1913 he entered the Japanese Naval Staff College. Afterwards, Isoroku was adopted by the Yamamoto family, and subsequently changed his name to Isoroku Yamamoto. The adoption was a routine occurrence in Japanese culture by families that lacked a male heir.

Before the close of the decade, Yamamoto made the first of two extended visits to the United States. During his first tour from 1919 to 1921 he studied English at Harvard University. He then returned to his homeland to teach briefly at the Naval Staff College before returning to the United States for two years beginning in 1926. The highlight was a stint as Japan's naval attaché.

Yamamoto's time in America had a profound influence on him. While rubbing elbows with US naval officers, he was able to see what most interested them and how they spent their recreational time. He thought that they were rather frivolous as they seemed to spend an inordinate amount of time playing golf and bridge.

But what did impress the young commander was the industrial might of the United States. He realised from his visits that a protracted war with the United States would be difficult, if not impossible, for Japan to win.

When he returned to Japan, his career soared to new heights. He had the good fortune over the next ten years to land a string of assignments, each of which would bring greater responsibility and prestige. Throughout this climb up the naval ladder, Yamamoto would have a chance to apply his sharp and visionary intellect. He began in 1928 by commanding the largest aircraft carrier in the Imperial Japanese Navy's fleet, Akagi. He was promoted to rear admiral the following year and assigned to lead the division of the Naval Air Corps responsible for upgrading and fielding new weapons and equipment.

In the 1930s, he was catapulted into the stratosphere of naval command. He led the First Carrier Division in 1934. Upon receiving a promotion to vice admiral in

1936, he was assigned to serve as the vice minister of the Imperial Japanese Navy. Two years later, he was given command of the First Fleet. These assignments were invaluable on-the-job training. On 30 August 1939, he was appointed to serve as commander-in-chief of the Combined Fleet. The position was the highest command in the Imperial Japanese Navy.

Yamamoto was a realist. He opposed the invasion of northern China in 1937, the subsequent Tripartite Pact of 1940 and – at least at first – conflict with the US, largely because he believed it would be unwinnable. At the same time he was convinced that if it became necessary, Japan must take all of the steps necessary to ensure it would prevail. Indeed, once Japan had invaded Indochina, Yamamoto argued for war with the US, while realising that Japan's only chance of victory lay in a surprise attack.

When sent to attend the London Naval Conference in 1935, Yamamoto had extracted Japan from a series of treaties by which Great Britain and the US restricted how many large ships the Japanese Navy could build in relation to their rival navies. The restrictions, first imposed after World War I, had relegated Japan to a second-rate naval power. In the late 1930s, the old-school Japanese admirals of the Naval General Staff invested heavily in building and launching two of the largest and most heavily gunned battleships ever built, the Yamato and Musashi. These 65,000-ton behemoths dwarfed the 45,000-ton US Iowa-class battleships. In their minds, the admirals envisioned a decisive battle between the big ships of the rival fleets clashing in the western Pacific, perhaps near the Mariana Islands or Marshall Islands.

Yamamoto fought a war of words with the Imperial Navy's top admirals in the year preceding

■ A dashing Captain Isoroku Yamamoto toured the United States twice in the 1920s, first studying at Harvard and later as naval attaché in Washington



**NAME:**Fleet Admiral
Isoroku Yamamoto**YEARS OF SERVICE:**

1901-1943

POSITION:Commander in Chief
of the Combined Fleet**SERVICE:**

Imperial Japanese Navy

the Pearl Harbor attack in which he sought to persuade them to discard the so-called big ships doctrine in favour of a new strategy centred on aircraft carrier tactics and capabilities. By using his sharp intellect, extensive experience and formidable connections, Yamamoto was ultimately able to get the empire's Naval General Staff to approve his plan for a pre-emptive strike on Pearl Harbor with a formidable armada of naval aircraft that included dive, torpedo and horizontal bombers, that would all protected by a large umbrella of fighter aircraft.

Yamamoto remained aboard his flagship in Japan's Inland Sea during the Pearl Harbor attack. From that location, he would issue a coded attack order, as well as final words of inspiration that were read to the fleet. As the mastermind behind the Pearl Harbor attack, Yamamoto exhibited to the world his tactical and strategic genius.

The subsequent campaigns that he directed did not go as well. In the attack on Midway Island in 1942, he sought to destroy American ships not caught at

Pearl Harbor, including the US Navy's aircraft carriers. However, the Battle of Midway was lost, in large part because Yamamoto's plan, which had multiple objectives that stretched his military assets, was too complicated. After that, the Imperial Japanese Navy was on the defensive in 1943 in the Guadalcanal and Solomon Islands campaigns.

Yamamoto committed his units piecemeal, never winning a decisive victory. Even so, convinced that they had to eliminate their most gifted adversary, US Navy officials used intelligence to discern his location in spring 1943. On 18 April, the Mitsubishi G4M bomber in which the admiral was being shuttled on an inspection tour of island bases in the Solomon Islands was shot down by a pack of US P-38 Lightning aircraft.

Yamamoto's body was recovered and cremated. He was given an elaborate state funeral on 5 June 1943. In recognition of his service and achievements, Yamamoto posthumously received the title of marshal. His ashes were divided, with half going to a public cemetery in Tokyo and the other half to his hometown of Nagaoka.

■ Admiral Yamamoto; many years earlier, he had served on the cruiser *Nisshin* during the Russo-Japanese war, where he lost two fingers on his left hand to Russian naval fire during the Battle of Tsushima

THE ATTACK

AS HUNDREDS OF JAPANESE BOMBERS SET OFF FOR PEARL HARBOR ON A SLEEPY SUNDAY MORNING, NOTHING COULD HAVE PREPARED THE AMERICANS FOR THE CARNAGE THAT WAS TO COME

WORDS BY HARETH AL BUSTANI



The morning of 7 December 1941 was an inauspicious one for the island of Oahu. A clear Hawaiian sky hung over Pearl Harbor, broken only with a few smudges of clouds. Among the 130 vessels stationed there were nine battleships, seven of which were concentrated along Battleship Row, on the southeastern coast of Ford Island, sailors snoozing atop still waters.

These were tense times, with vague rumblings of an imminent Japanese attack, one that always seemed but a few steps away. Though the Japanese appeared to lack the capacity for a direct assault, sabotage by the island's local Japanese residents was a distinct possibility, and Americans had arranged their aircraft in groups across the Kaneohe Bay, Hickam, Wheeler and Bellows airfields.

Little did they know, 260 miles north a storm was brewing; a gargantuan Japanese fleet of 33 ships approached. As dawn cracked across the sky, the Zero fighters departed from their carriers amid a hail of bravado and began circling overhead. Standing on the Akagi carrier, Commander Mitsuo Fuchida wrapped a hachimaki band around his head emblazoned with "Certain Victory" and readied to lead 183 planes in V-formation towards Hawaii. The crew were enraptured. This was their moment; the Empire of Japan was crossing the Rubicon.

At 6.45am, USS Ward spotted the conning tower of an unidentified two-man submarine making its way towards Pearl Harbor and sank it with depth charges and gunfire. 15 minutes later, when a radar operator picked up plane movements coming in from the north, superiors dismissed it as a fleet of friendly bombers. Despite the irregularities, most men were happily tucked in bed. This was a Sunday, which for many meant a day away from the base and chapel services.

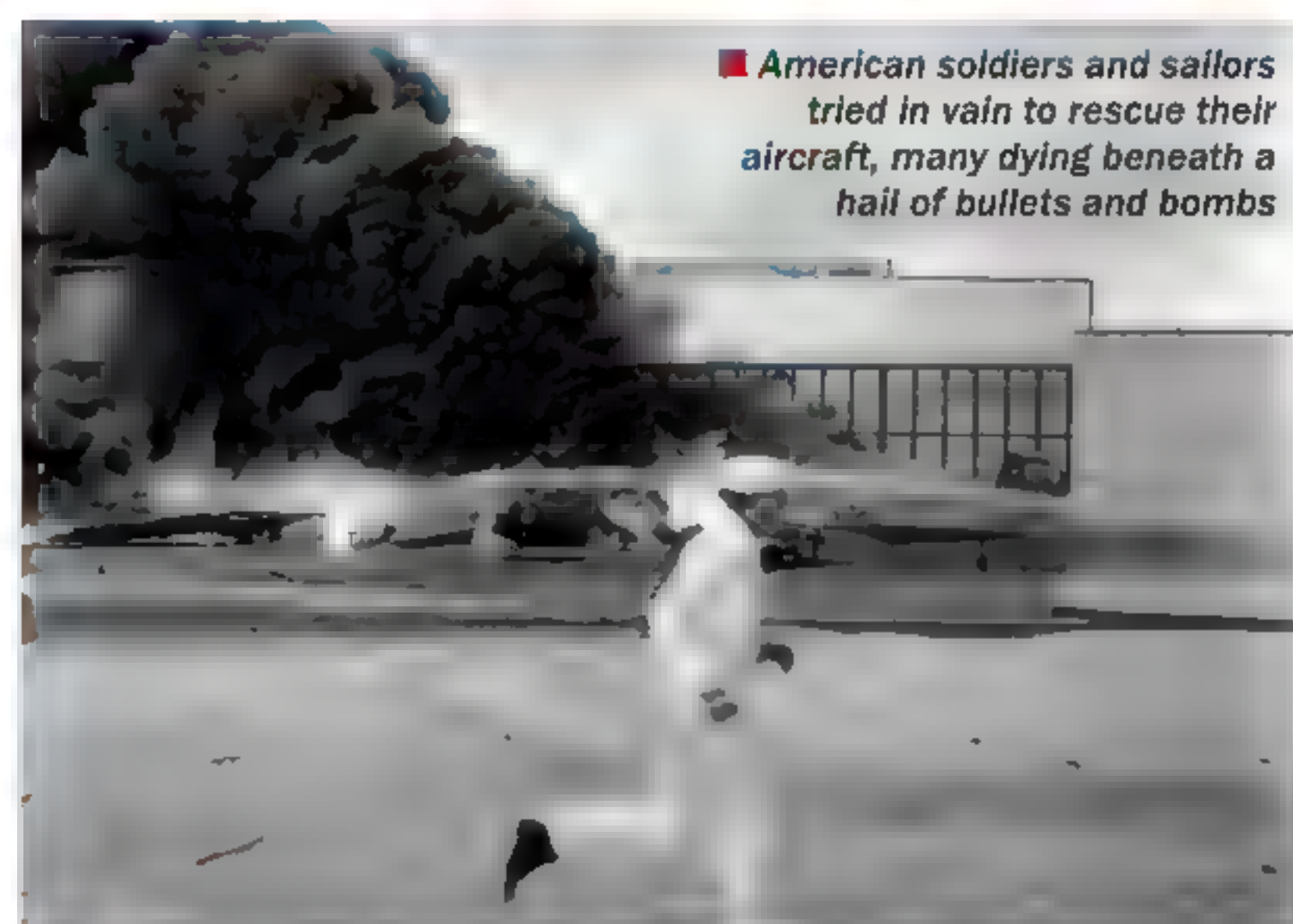
Roaring across the horizon, Fuchida's bomber, marked with a red-and-yellow-striped tail, descended upon Oahu trailed by a stream of planes, decorated with the Japanese rising sun, their white bellies blending with the clouds. "One hour and 40 minutes after leaving



■ Almost half of America's casualties died aboard the Arizona after an 800kg bomb struck its magazine, unleashing an almighty blast



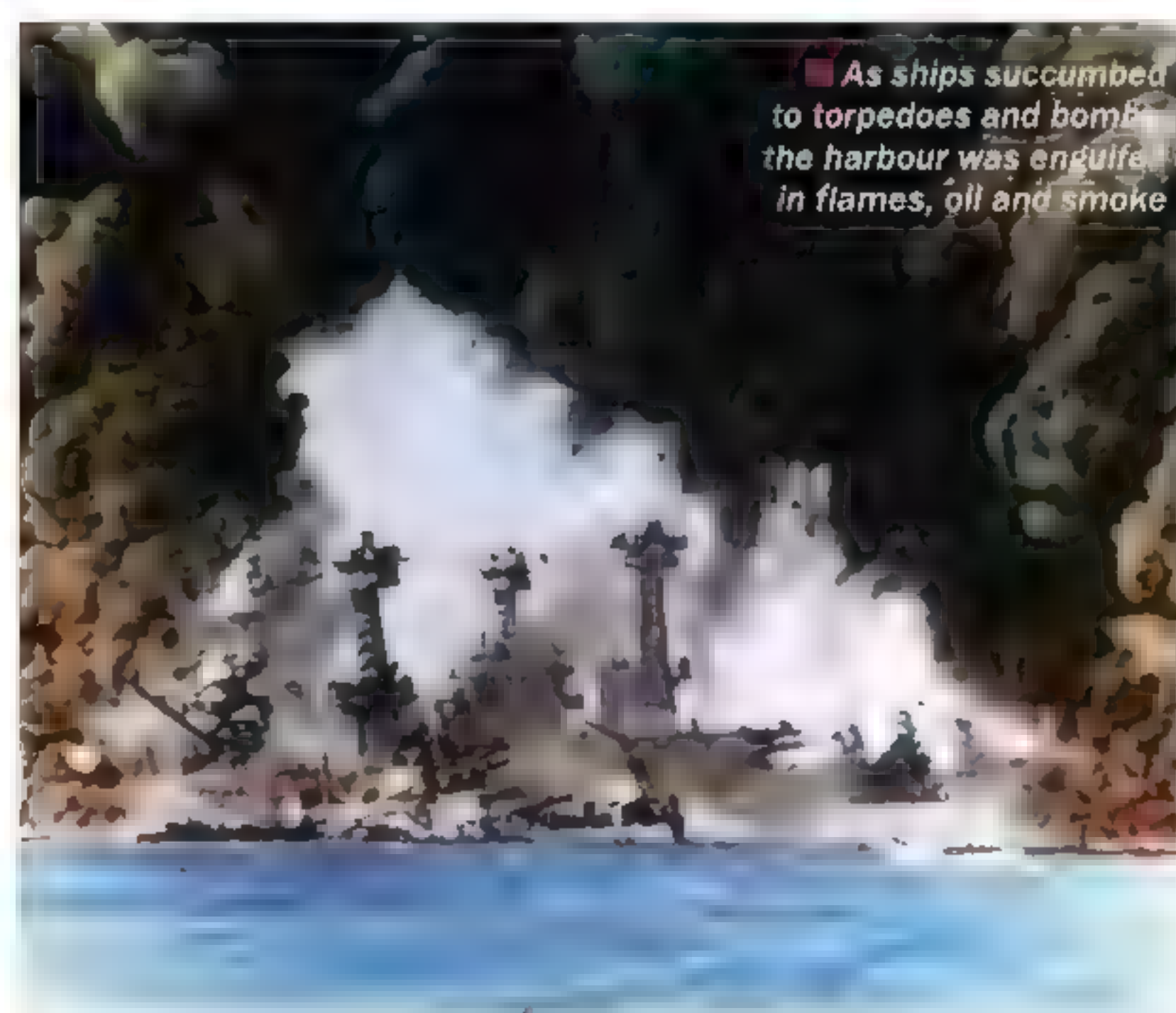
■ The outfield ships at Battleship Row, such as the West Virginia, Tennessee and Arizona, were prime targets of the attack



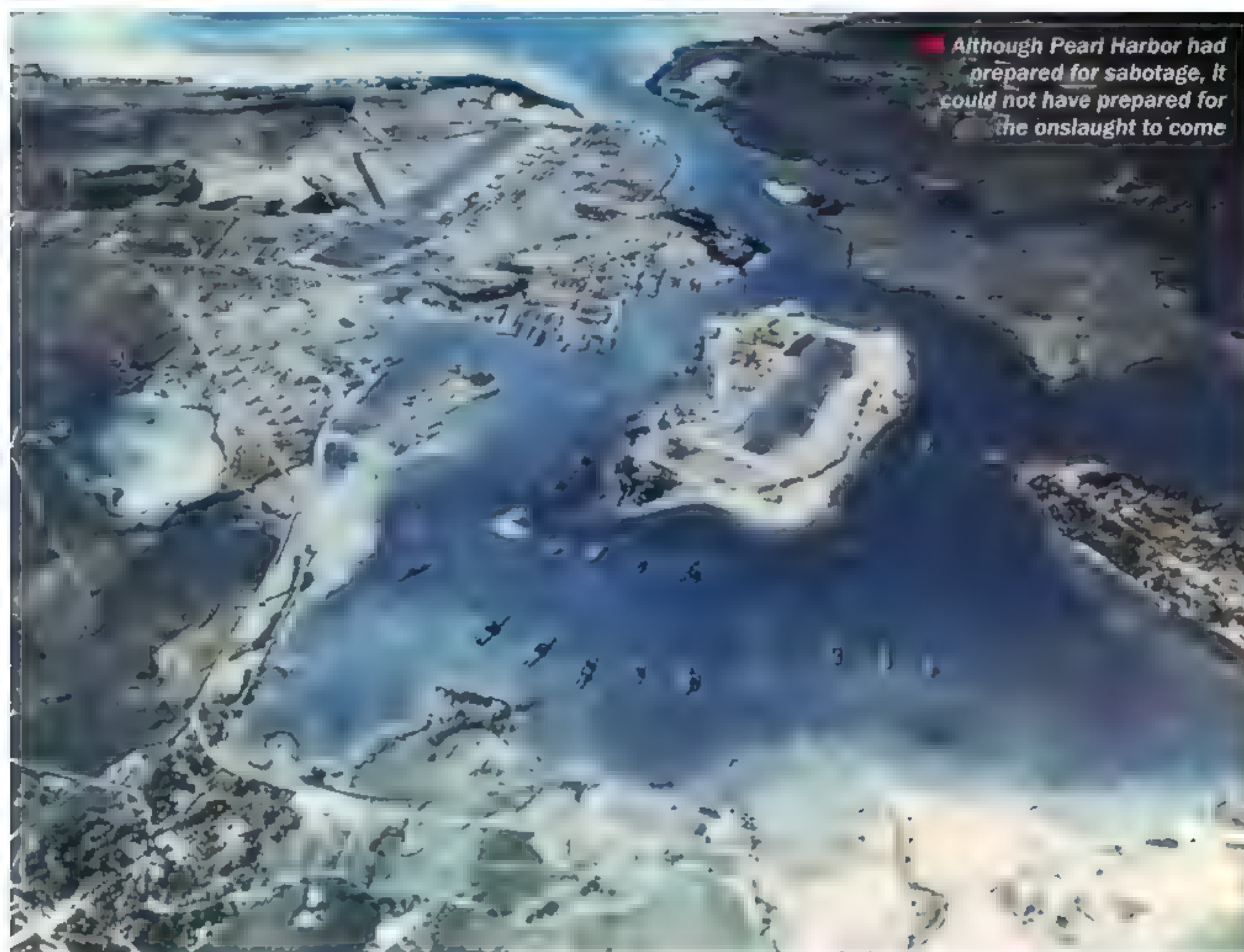
■ American soldiers and sailors tried in vain to rescue their aircraft, many dying beneath a hail of bullets and bombs



■ The Japanese painted their planes' bellies white in order to blend in with the clouds



■ As ships succumbed to torpedoes and bombs the harbour was engulfed in flames, oil and smoke



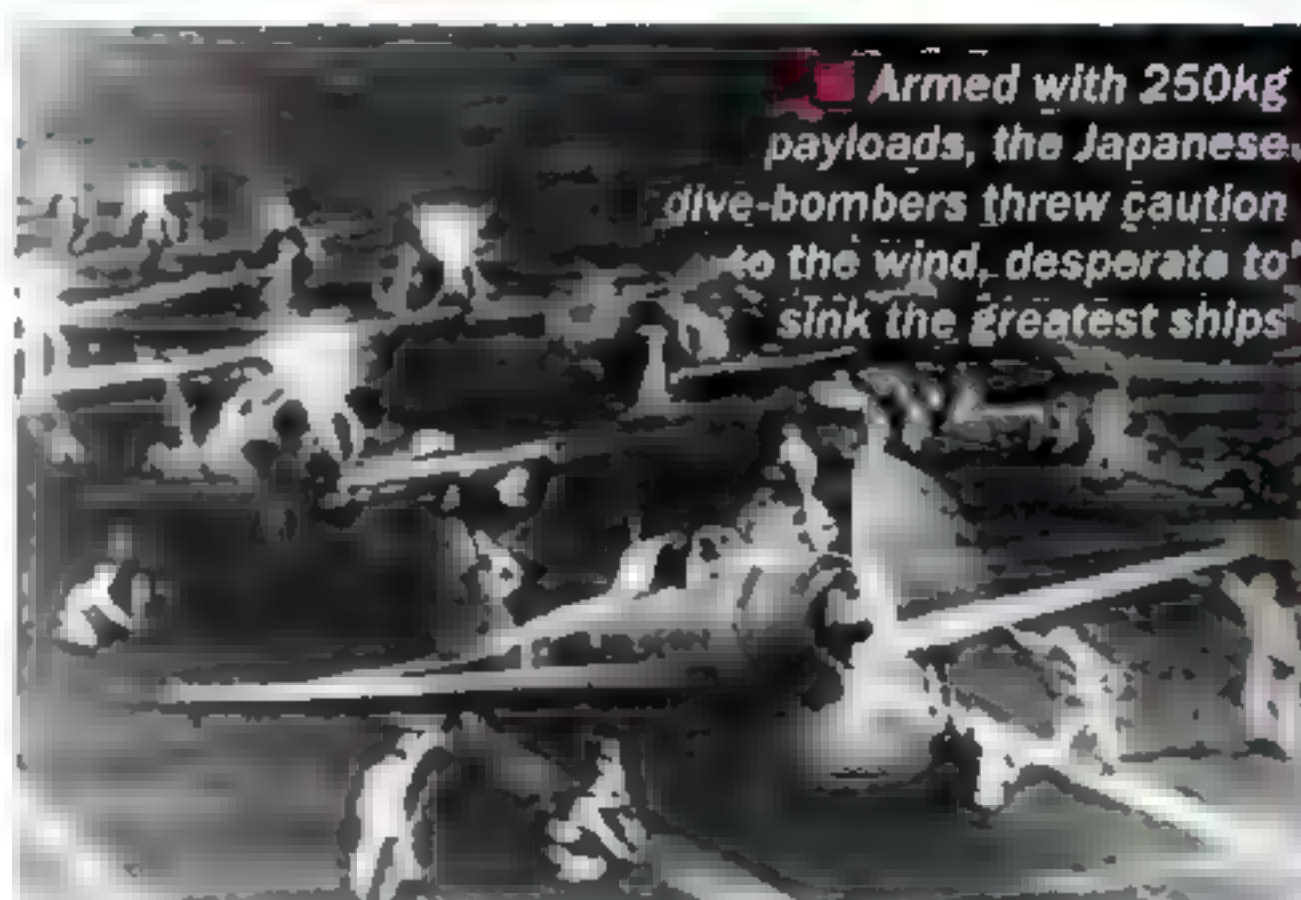
■ Although Pearl Harbor had prepared for sabotage, it could not have prepared for the onslaught to come

the carriers, I knew that we should be nearing our goal," Fuchida reflected. "Small openings in the thick cloud cover afforded occasional glimpses of the ocean as I strained my eyes for the first sight of land. Suddenly, a long white line of breaking surf appeared directly beneath my plane. It was the northern shore of Oahu."

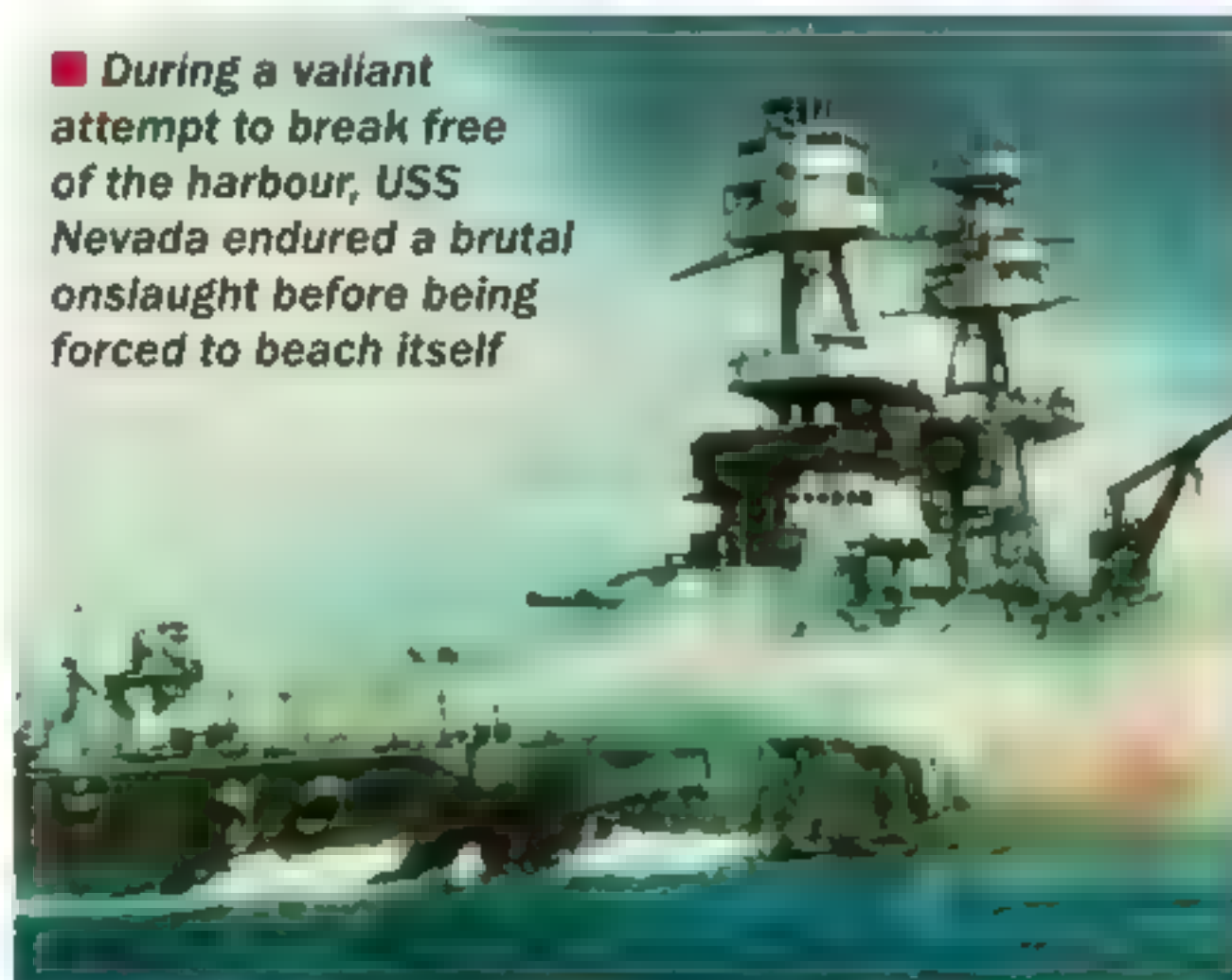
As the battleships of Pearl Harbor revealed themselves through Fuchida's binoculars, to his disappointment he realised the coveted aircraft carriers were absent. Regardless, he had his radio man tap out the attack code: "TO, TO, TO", and fired a flare to signal the Americans had been caught completely off guard. Having achieved the element of surprise, crucial to their shallow-angled attacks, the torpedo-bombers were to lead the charge. However, when the Zero fighters failed to get into position, Fuchida launched a second flare, which the dive-bombers mistook for a shift to their contingency plan, meaning that they instead should lead the attack and draw away anti-aircraft fire. As the dive-bombers' Aichi D3A 'Vals' rose upwards and out of sight, Lieutenant Commander Shigeharu Murata rushed his torpedo-bombers towards their target as fast as possible.

Just after 7.50am, the Vals unleashed a hail of bombs on Wheeler Airfield followed by the Zeros, who circled the field and buildings tearing up planes, quarters, buildings and even the golf course with their 20mm cannons and 7.7mm machine guns. Bullets punctured fuel tanks, setting pools of gasoline alight, immolating the parked planes, which exploded, setting off chain reactions all down the line. Amid the bonfire, Fuchida radioed his task force: "Tora, tora, tora", the "lightning attack" had been a success.

As they reached the island, the high level and Nakajima B5N2 'Kate' torpedo-bombers swooped around the western coast. While the high-level bombers arched around the ocean, the torpedoes split in two over the



■ Armed with 250kg payloads, the Japanese dive-bombers threw caution to the wind, desperate to sink the greatest ships



■ During a valiant attempt to break free of the harbour, USS Nevada endured a brutal onslaught before being forced to beach itself

southwestern Ewa Beach, with lieutenants Takashi Nagai and Heita Matsumura leading 16 planes around the west side of Pearl Harbor, while lieutenants Murata and Ichiro Kitajima flew 24 bombers over Hickam Field, towards Battleship Row.

At 7.55am, Commander Logan Ramsey was looking out of Ford Island Command Centre when he spotted a single aeroplane diving towards the island. He had a mind to report the pilot for 'flathatting', or reckless flying. However, as the plane pulled up from its daredevil dive, an explosion burst out from beneath it and the truth sunk in. Ramsey hurtled towards the radio room shouting, "Air Raid, Pearl Harbor. This is no drill."



■ Admiral Nagumo's decision not to launch a third wave of attacks on Pearl Harbor was a great error of judgement

THE THIRD WAVE

Japan's decision not to follow up its tactical masterstroke may have been its undoing

When Commander Fuchida landed back at the Akagi at 1pm having surveyed the damage at Pearl Harbor, he discussed the possibility of launching a third wave of attacks to annihilate the remaining ships, as well as the dockyards and fuel tanks. Several of his fellow officers supported the idea, and one still sought to find and destroy their chief target – the American carriers. However, Admiral Nagumo was unconvinced. He believed the Japanese had done enough, and the risk of more casualties inflicted by American defences would render further action redundant. At 4.30pm he ordered a withdrawal.

While a third wave would most certainly have faced a brutal pushback, Nagumo's decision to pre-emptively turn back, short of dealing a critical blow, may have been the single gravest error of the entire war. Oahu still maintained 4,500,000 barrels of oil, and the loss of these resources would have drastically set the Americans back. On the contrary, Admiral Chester Nimitz said, "The fact that the Japanese did not return to Pearl Harbor and complete the job was the greatest help to us, for they left their principle enemy with the time to catch his breath, restore his morale, and rebuild his forces."

Having reached Pearl Harbor first, the dive-bombers unleashed a barrage over the southern tip of Ford Island. Logan's eardrums seemed fit to burst with each explosion: "The harrowing noise of the destruction wrought by the torpedo-planes and bombers pounding our fleet was almost more than we could bear."

As they hit the harbour, Lieutenant Nagai's torpedo-bombers dropped their payloads at great speed, skimming through the water and rocking the Utah and neighbouring Raleigh with enormous explosions. Blinded by the Sun, Nagai mistook the Helena light cruiser and Oglala minelayer for a battleship, dropping a torpedo that hit the Helena's engine room, damaging both vessels. As others began to

Wheeler Airfield was decimated, first by Yals, and then the Zeros, punching holes in fuel tanks and blowing up scores of planes and buildings.



■ During the second wave, Japanese dive-bombers struck the USS Shaw with three simultaneous bombs, sparking a fire that later detonated its ammunition magazines.



“A TORPEDO RIPPED THROUGH THE ROOM, TEARING HIS COMRADES APART. THE SHIP WAS ROCKED BY NINE SUCCESSIVE TORPEDOES. IT BEGAN SPEWING OUT THICK BLACK SMOKE BEFORE CAPSIZING”

target the Helena, fellow bomber Mori Juzo flew on, refusing to “waste” his torpedo “on such a small target”.

Eager to destroy the American battleships, at 7.57am a wave of torpedo-bombers approached Battlefield Row in single file, their attacks concentrated on USS Oklahoma and West Virginia. American officers yelled expletives so their men were sure this was no drill. The West Virginia buckled under seven torpedoes and began gulping in water. Trapped beneath a flooded deck, Ensign Archie Kelley sealed the watertight door between the central station and the next compartment, which was taking in water. To his horror, four men approached the other side of the door screaming and

desperately trying to open it. However, he had 40 men on his side of the door. He looked at Commander Harper, asking the “unspoken question” of whether to open the door or not. “His face indicated he didn’t want me to.” They would spend an hour in water up to their shoulders before climbing up an escape tube.

When the crew of the Vestal, outboard of the Arizona, began firing at the bombers, the commotion stirred Ensign Ed Farley from his sleep aboard the PT 23. Dragging himself to the deck, he watched a Japanese plane masterfully swing to the west and strike the California, triggering an explosion. Two of his crewmates leaped onto the .50-cal machine guns, blasting one of the Japanese planes out of the sky.

Aboard the Oklahoma, as fresh graduate Joseph Spitler ran past the junior officers’ quarters, where many were still asleep, a torpedo ripped through the room, tearing his comrades apart. The ship was rocked by nine successive torpedoes, each so powerful that the ship jumped. The Oklahoma began spewing out thick black smoke before finally capsizing with 400 men trapped within her bowels. Japanese fighters ruthlessly picked off survivors as they tried to swim to safety.

Ensign John Landreth had initially believed that the alarm was a drill, a “low blow” for a Sunday morning. However, he emerged from USS Nevada just in time to see the stricken Oklahoma keel over. His commander defied regulations, ordering his men to keep ammunition boxes full and guns ready. Many of them displayed amazing courage; gunner JK Taussig Jr refused to stand down, even after being hit in the thigh. One of the planes they shot apart was able to launch a torpedo before going down, tearing a hole in the ship.



The light cruiser Helena, first torpedoed by Lieutenant Nagai, burns on the left, while workshops and stores burn on the right

Amid the chaos, Fuchida's 49 high-level bombers arrived on the scene at 8.05am, hoping to destroy the inboard battleships tucked behind the outboard targets already hit by the torpedoes. The commander himself made a narrow escape as "dark grey puffs" of anti-aircraft flak exploded around him, punching a hole in the fuselage and damaging his rudder wire. His men were persistent, some swooping around three times before landing a hit.

One of their bombs, an 800-kilogram beast, ripped through the Arizona's magazine, triggering an enormous explosion that scattered her crew in all directions. The ensuing blast was so powerful that it extinguished the flames atop the Vestal and blew the nails out of the ceiling of nearby barracks. Fuchida felt it shake his plane miles away. Hunks of metal and burning flesh rained down in all directions as the Arizona dragged 1,200 doomed crewmen to their graves.

"HUNKS OF METAL AND BURNING FLESH RAINED DOWN IN ALL DIRECTIONS AS THE ARIZONA DRAGGED 1,200 MEN TO THEIR GRAVES"

Stray bombs and rounds reached as far as Honolulu. Unwittingly, a group of planes arriving from the American mainland flew into a maelstrom, picked apart by panicked friendly fire or else the Japanese Zeros. On the ground, the Zeros targeted the B-17s, raining 7.7mm bullets down on them while Americans desperately tried to taxi them to safety. As the violence intensified gunners at Fort Kamehameha set up their machine guns on a tennis court and took out the Zero leader's wingman.

As Admiral Husband Kimmel looked out of his office window, a spent machine gun shell burst through and recoiled off his chest. Staggering back, he looked down and mumbled, "It would have been more merciful had it killed me."

Back in the Middle Loch, a Japanese plane burst into flames. Miraculously, its pilot wrestled with his controls, crashing it head on into the USS Curtis. Still intact, the Curtis spotted the only Japanese submarine to make it into the harbour and blew its conning tower up. Sensing a lull in bombardment at 8.39am, the Monaghan made its way south-southwest towards the open sea, ramming into the submarine and dropping a depth charge for good measure.

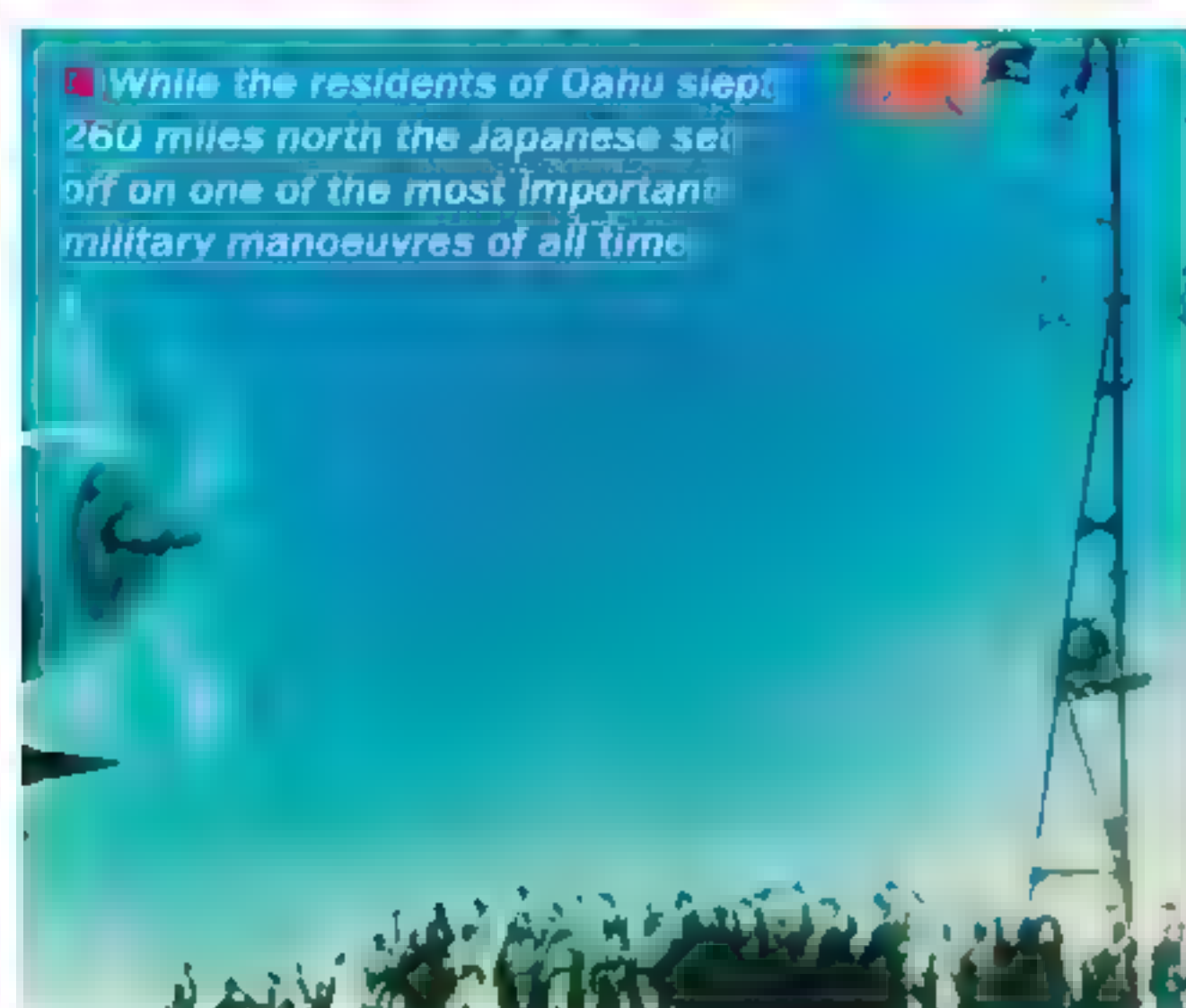
By 8.55am, Lieutenant Commander Shigekazu Shimazaki arrived with a second wave of planes, including 54 high-level bombers, 78 Vals and 36 Zero fighters. A detachment of 18 high-level-bombers and 17



With photos of the pilots' pockets, despite the element of surprise, the pilots were proud to die for their empire



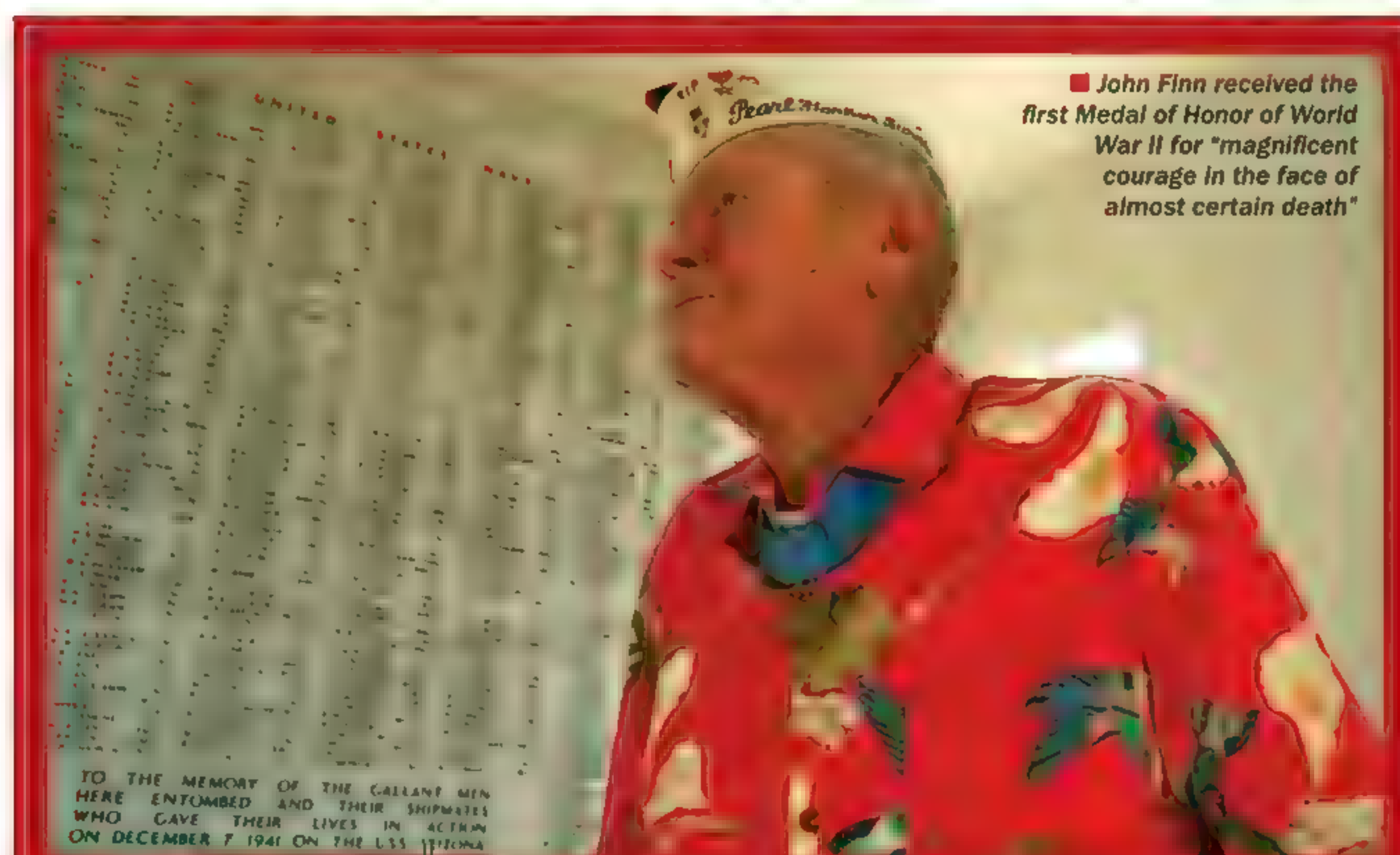
■ Throughout the second wave, as the Americans mobilised their defences, Japanese pilots faced increasing resistance.



■ While the residents of Oahu slept, 260 miles north the Japanese set off on one of the most important military manoeuvres of all time.



■ After being rocked by seven torpedoes, crew trapped in the USS Arizona's lower decks drowned.



■ John Finn received the first Medal of Honor of World War II for "magnificent courage in the face of almost certain death"

TO THE MEMORY OF THE GALLANT MEN
HERE ENTOMBED AND THEIR SHIPMATES
WHO GAVE THEIR LIVES IN ACTION
ON DECEMBER 7, 1941 ON THE USS ARIZONA

PEARL HARBOR'S REAL-LIFE RAMBO

As Pearl Harbor reeled in panic, John William Finn threw caution to the wind, emerging an American hero

Although Chief Ordnanceman John William Finn was looking forward to a hard-earned Sunday off duty, he and his wife were stirred from their bed by the sound of machine guns. Amid the chaos, he leapt into his car and throttled towards Kaneohe Airfield. Boasting 15 years of service under his belt, Finn was responsible for Kaneohe's machine guns, and rather than fearful, he was enraged by the attack.

Defiantly, as he reached the hangars, he set up a pair of machine guns, a 30-cal and a 50-cal, in the middle of a parking ramp and began shooting furiously at the enemy planes

predominantly with the 50-cal. As sailors handed him a steady stream of ammunition, Finn unleashed endless rounds on the enemy, firing for two and a half hours, even as he was splintered, shot and shredded by numerous pieces of shrapnel.

Finn refused to step aside until ordered to receive medical treatment for some 20 injuries, only to return to the fight soon after. His bravery earned him World War II's first Medal of Honor for "magnificent courage in the face of almost certain death". Looking back, he recalled, "I was so mad, I wasn't scared."

Zeros attacked the hangars and planes at Kaneohe before eight fighters moved on to Bellows Field to mow down stationary planes and those trying to take off.

Against the odds, four daring American pilots managed to take off in their P-36s and took the fight to the Japanese at Wheeler Airfield. The American defences were now in full swing, and none bore the brunt quite like Lieutenant Commander Takashige Egusa's dive-bombers, with their 250-kilogram bombs. Tasked with mopping up the rest of the battleships at Pearl Harbor, they had to contend not only with thick clouds of smoke but an unending hail of flak. Lieutenant Zenji Abe recalled getting "the shivers" as the anti-aircraft barrages began. With the harbour in chaos, Egusa's planes simply scattered and decided to take out whatever targets they could.

They threw their planes downwards, 60 degrees from 3,000 metres high, headfirst through smog and flak, dropping their payloads and swooping back heavenwards, like condors, fearless in the face of carnage. With photos of their wives and children tucked in their pockets, the Japanese bombers prioritised honour over practicality, hunting the largest ships rather than the most vulnerable. Egusa himself hit the New Orleans first while his wingmen bombed the Cassin and Downes destroyers, setting them alight. The Shaw, too, was set aflame, and 18 people were killed when a bomb hit the enormous Pennsylvania.

At 9.30am, the Helena began to topple over, and soon after the Shaw was engulfed by a massive explosion. As the torpedo-struck Nevada desperately made her way out of the harbour, picking up survivors en route, she was singled out and stalked. Scores of bombs battered her so badly she had to beach herself to avoid clogging the harbour. Charles Merdinger, an ensign who had graduated from the naval academy earlier that year, was stuck at the bottom of the ship on fire control duty with no electricity and little oxygen. As men were mowed down on the top, others ran up to replace them on the anti-aircraft guns. "The people who were going up thought they were going to get shot, and the ones who stayed thought they were going to get drowned," he recalled.

Egusa's squadron made for Hickam, Wheeler and Ewa to further decimate the airfield and buildings. However, lieutenants George Welch and Kenneth Taylor managed to take off in a pair of P-40s, shooting down four planes, refuelling and then taking out another three. After almost two and a half hours of carnage, with their weapons spent, the Japanese began to return to base. The last among them was Fuchida, who at 11am flew over Oahu assessing the damage. Ships' carcasses littered the harbour alongside hundreds of bobbing bodies, stained black from the spilled oil.

When all was said and done, the Americans had lost 2,388 men, 18 ships were sunk or damaged, 169 aircraft had been destroyed and a further 150 damaged. The Japanese, on the other hand, had only lost 185 men and 29 planes. Despite their best efforts, the Americans could never have prepared for an attack this egregious, this bold. Though the future was unclear, one thing was for certain: like it or not, war had come to America.

SHOCK AND AWE

7 December 1941

Reckoning that America would not have the resolve to wage a protracted and bloody war thousands of miles from home, Japan took a huge gamble by launching its surprise aerial attack on Pearl Harbor on 7 December 1941. However, the plan was not without its detractors, with many senior Japanese commanders wary of risking so much so far from home. Ultimately, the decision to strike the United States would have horrific consequences for Japan, with over 2.5 million military losses and upwards of 1 million civilians killed.





JAPAN ATTACKS

HOW THE IMPERIAL JAPANESE NAVY LAUNCHED ONE OF HISTORY'S MOST DEVASTATING RAIDS

FIRST ATTACK

49 HIGH-LEVEL BOMBERS
51 DIVE-BOMBERS
40 TORPEDO BOMBERS
43 FIGHTERS

THE FIRST WAVE OF ATTACKING AIRCRAFT

Launched at 6.10am, it takes the 183 attack aircraft just 15 minutes to get airborne and in formation.

WHEELER FIELD

Japanese fighter planes target Wheeler first and, about four minutes later, attack Pearl Harbor.

PICKED UP BY RADAR

At 7.02am, the Opana radar station picks up the first wave, however, it's mistaken for the flight of B17s.

SECOND ATTACK

54 HIGH-LEVEL BOMBERS
78 DIVE-BOMBERS
36 FIGHTERS

THE SECOND WAVE

At 7.20am, the Japanese launch another 167 attack aircraft. This follow-up assault is designed to hit specific military targets.

HALEIWA FIELD

Nine Japanese aircraft are shot down by pilots from this airfield.

BELLOWS FIELD

Eight Zeros attack, shooting down two American fighters.

USS SHAW EXPLODES

This destroyer is in dry dock for repairs, and is bombed towards the end of the raid, causing its magazines to erupt.

AICHI D3A 'VAL' DIVE BOMBER

Of the 441 aircraft in Japan's task force, 153 were 'Val' dive-bombers. Thought to be obsolete by the Allies, they were used to devastating effect at Pearl Harbor. With a 250-kilogram bomb strapped to its fuselage, the Val went on to sink more Allied warships than any other Axis aircraft during the entire conflict.

BATTLESHIP ROW

What vessels survived the attack?

USS Pennsylvania Damaged

In dry dock at the time, repeated Japanese attempts to torpedo the calson it was held in failed. Damaged by bombs, 68 of its crew were killed or wounded.



USS Arizona Sunk

Attacked by ten Kate torpedo planes during the first wave. One torpedo hit the ship's forward magazine resulting in a gigantic explosion. Of its 1,512 crew, just 335 survived.



USS Nevada Seriously damaged

Despite being torpedoed, Nevada was able to escape Battleship Row during the attack. It was repeatedly targeted by dive-bombers from the second wave.



USS Oklahoma Sunk

Hit by three torpedoes early in the raid. As it capsized, a two more torpedoes smashed into its listing hull, and its crew was machine gunned while trying to abandon ship.





★★★ **SHIP KEY** ★★★

Red	Sunk
Orange	Heavily damaged
Light Blue	Moderately damaged
Dark Blue	Not damaged

USS ARIZONA SUNK
Within minutes of the attack beginning, the battleship Arizona is hit by high-altitude bombing. It sinks within nine minutes.

USS NEVADA TORPEDOED
Crippled early on in the attack, Nevada is pounded by the second wave as it tries to escape out to sea.

USS OKLAHOMA CAPSIZES
Ten torpedoes rip through the battleship's hull. It capsizes in just 12 minutes with 461 men still trapped inside.

HICKHAM AIRFIELD ATTACKED
12 unarmed Flying Fortresses are, by coincidence, attempting to land as Hickham is attacked. Five are lost.

NAKAJIMA B5N 'KATE' TORPEDO BOMBER
In 1941, the 'Kate' was considered the best carrier-borne torpedo bomber in the world. Dubbed Kate by the Allies who identified Japanese aircraft with Western-sounding names, there were 162 of them on the raid. Armed with an 800-kilogram torpedo or 250-kilogram bomb, Kate bombers sunk USS Oklahoma.

USS Tennessee
Minor damage

Tennessee was hit by two armour-piercing bombs, which destroyed two gun turrets. Shrapnel from the first also killed the captain of USS West Virginia, which was moored next to it.



USS California
Sunk, Refloated and rebuilt by Jan 1944

All portholes and hatches on California had been left open causing flooding when it was hit by torpedoes. It took the ship three days to sink.



USS Maryland
Damaged

Hit by two armour-piercing bombs that exploded low on its hull, causing flooding. It stayed afloat, however, and its crew fought back. Two officers and two men were killed.




USS West Virginia
Sunk, Refloated and rebuilt by July 1944

Five torpedoes sunk West Virginia. When it was refloated, 66 bodies were recovered with evidence some had survived for 16 days.



Illustrations: Adrian Maw





EYEWITNESS

ATTACK ON PEARL HARBOR,
HAWAII, USA, 7 DECEMBER 1941

WRITTEN BY JONATHAN O'CALLAGHAN

WALTER CHARLES EBEL

Charles Ebel, from Guilderland, New York, was serving as a seaman first class aboard the USS Curtiss, a seaplane tender, when Japanese warplanes attacked the US naval base at Pearl Harbor. From his unique vantage point across Ford Island, Ebel saw many ships sunk in the most deadly foreign attack on American soil until 11 September 2001.

“We expected them to come back. I thought the Japanese would take over Pearl and probably the States”



On the morning of 7 December 1941, Walter Charles Ebel and a friend were getting ready to go surfing at Waikiki Beach, totally oblivious of the horror that was heading their way.

“My buddy and I were learning to surf,” said Ebel. “We’d ride these [3.6-metre] 12-foot bores and sometimes you’d be on one wave and your board would be on another, so you’re just trying to catch it.”

And then, in the blink of an eye, everything changed. “I was looking out the hatch [aboard the USS Curtiss] and I heard this roar, and I just saw a plane drop a bomb right onto that poor island where the planes were. And then he came back by the hatch I was standing in, so he was side on, and he had this big smile [on his face]. He went up the channel – he was looking for another target, I guess – and that was the start of it. From then on you knew it was [going to be] tough.”

Ebel sprung to action. Once all hell had broken loose, his captain told him to head to the main deck to see if there was anything he could do. There was one machine gun on the deck, which was unmanned. “In one flowing moment I jumped onto it and fired that for a while,” said Ebel. “If there was any goal it was to stay alive.”

What had started as just another day for Ebel in the idyllic setting of Honolulu in Hawaii turned out to be the scene for the greatest loss of life on American soil at foreign hands until 9/11 60 years later. Around 2,400 Americans were killed and 1,200 wounded.

In the months prior to Pearl Harbor, Ebel had been on cruisers in the South Pacific. On 6 December his ship, the USS Curtiss, had dropped gas off at Wake Island north of the Marshall Islands. A last-minute decision saw the Curtiss head for Honolulu. Upon arrival another ship had taken the Curtiss’s berthing point near Pearl Harbor, so the captain ordered

the ship to swing around behind Ford Island. On the way the Curtiss picked up 378,540 litres (100,000 gallons) of gasoline, before berthing at night on 6 December 1941.

When the attack broke out, the Curtiss was somewhat fortunate with its position. Its berthing point was far enough away from Pearl Harbor that it avoided the majority of the Japanese onslaught, but the horrors the crew witnessed were anything but fortunate.

As Ebel explains though, they weren't completely removed from the action. "Our ship got credit for shooting down three planes and partial credit for a submarine," he said. "When we were in battle this submarine popped up behind us, and so we fired over the top of the sub. It went down but when it came back up it let go of a torpedo and it went right by our ship about [3.6 metres] 12 feet out. It felt like it was closer, but they always look closer in your mind. The torpedo went up the channel, I don't know where it ended up, but there was a destroyer in the channel and the submarine ran at the sight of him. It went down and never came back up again. That was the start of everything big."

As mentioned, the Curtiss had just picked up thousands of gallons of gasoline, and Ebel was all too aware of the fact that he was essentially standing on top a massive bomb: "There was a joke I always remember I said to my buddy. I asked him where he was going and he said to get a life jacket. I said, 'See if you can find me a parachute – that life jacket isn't going to be much help when that gas goes off!'" Fortunately, the gasoline never ignited and the Curtiss survived.

Ebel saw a lot of his friends perish on the Curtiss; in total 19 would die on the ship, with many more wounded. At the time, though, he was forced to hide any nerves he might have. "We were all accustomed to the drills," Ebel explained, "but when you get the real thing, anything can happen. I was always composed pretty well, I was only a tiny bit nervous. It's part of the battle, I guess. You just get going and do your job, that's all. What else are you going to do?"

The attack itself ignited an almost psychotic fury within some of the American soldiers, highlighted by a grisly moment aboard the Curtiss. When a Japanese dive-bomber hit a crane on the Curtiss and crashed onto the deck, Ebel witnessed first-hand the extent of his fellow compatriots' anger. "When the plane hit the crane [the pilot's] head came off and skated across the deck," states Ebel. "Our guys were vicious and they started trying to pull out his teeth with a pair of pliers. That always



■ Sailors at Ford Island air base stand amid plane wreckage



■ Captured from a Japanese aircraft, this image shows several vessels on Battleship Row under fire from torpedo planes

THE DAY AMERICA WAS ATTACKED



HST

The minesweeper ship Condor spots a sub 3.2km (2mi) from Pearl Harbor and sends a warning to the USS Ward.

3.42am

153 fighters, bombers and torpedo planes take off from Japanese aircraft carriers north of Oahu.

6.10am

The Opana Radar Station on Oahu spots more than 50 aircraft bearing down on them, much to the incredulity of the two privates on duty.

7.02am

A lieutenant incorrectly believes the planes sighted by the radar station to be US B-17 bombers, and fatally dismisses the warning.

7.20am

Japanese planes bear down on Pearl Harbor as the clouds clear.

7.40am



The Japanese first bomb the US Air Force's Wheeler Field north of Pearl Harbor, destroying most of the US warplanes on the ground.

7.55am

“OUR GUYS WERE VICIOUS... THEY STARTED TRYING TO PULL OUT HIS TEETH WITH A PAIR OF PLIERS. THAT ALWAYS STOOD OUT BECAUSE I WAS JUST 20”

stood out because I was just 20 turning 21 and stuff like that bothered me. After a while you realise [the enemy is] just another person.”

With the attack fully underway, the Curtiss was dealt a stroke of fortune. A bomb had shattered the mooring on the back of the ship and, according to Ebel, “We were swinging around, and that helped us because if [the planes] passed us once then when they came back [on an attack run] we might have a different position.” But while they were spared the full brunt of the Japanese assault, Ebel had an unwanted vantage point of what was happening around the rest of the harbour.

“The sky was full of them – they were like bees,” recalls Ebel. “There were planes everywhere. This torpedo plane went right by us and sunk the USS Utah, and I saw when they dropped a bomb on the USS Arizona; it went right down the smoke stack and it blew it right out of the water.” The surprise nature of the raid was the main reason so many of the ships would be sunk, according to Ebel: “The Japanese got to our ships with the watertight doors all open – that’s why they sunk them, otherwise you couldn’t. They could shoot the whole top of a ship away and it still wouldn’t sink because they’ve got watertight doors like air pockets, and that’s what keeps them afloat.”

But as suddenly as the attack had begun that morning, around an hour later “they stopped all at once”. Ebel and his crew, however, as you’d expect, remained on high alert. Some, including Ebel, even anticipated that Pearl Harbor was only a precursor to an invasion of the American mainland. “We expected them to come back,” said Ebel. “I thought the Japanese would take over Pearl [Harbor] and probably the States.”

“I always figured they could take the US over easy because they had the most aircraft carriers of anywhere in the world, and all they had to do was send one to Seattle and one to San Diego and nobody could stop them because [the US military was mostly] in Hawaii or other places. We never had much protection [in the United States during World War II]. They made a big mistake [in not coming back to take Pearl]; they lost the war right there. They might have won it. I don’t know if they could have kept Hawaii or not, but if they’d gone to the States it

would have been a different story. I’m glad they didn’t.”

For many of the Pearl Harbor survivors, the eventual Allied victory in the war four years later brought little consolation for what had happened on that tragic day. “I just feel sorry for all those people that got killed,” Ebel tells us. “There was a cemetery up on a hill there in Hawaii. They used to dig these big long

trenches and all these bodies sewn up in canvas bags would just get dropped in and they’d put up a cross. They didn’t know who they were. It went for as far as you could see. I remember that – it never goes away. In the back of your mind, it’s always there. I wish I didn’t see it but I did.”

The attack took place over seven decades ago, and thus many of the survivors have since passed away. Those remaining, though, like Ebel, are still struggling to come to terms with it. “It doesn’t prey on my mind all the time like it used to,” he said. “I used to walk down the street and somebody would slam a car door and I’d jump. Not any more. I don’t have any nightmares about it like I used to. But you never get over it.”

■ Over 1,100 US Marines were killed on the USS Arizona



Most of a squadron of 12 unarmed American B-17s manage to land at Oahu, not initially aware that Japan was attacking. One of the B-17s touches down on a golf course.

8.00am

Sinking Arizona
A bomb hits the USS Arizona, setting off 450,000kg (1m lb) of gunpowder and instantly destroying the ship, along with 1,177 crew on board.

8.10am

The USS Utah is scuppered.

8.12am



The second wave of Japanese fighters arrives, attacking the navy yard dry dock and many other ships.

8.54am

A third Japanese strike is rejected by superior, believing the earlier attacks have done enough damage.

10.00am

The Japanese aircraft carriers head for home, with over 2,400 American soldiers left dead.

1.00pm

THE USA'S CALL TO ARMS

THE ATTACK WAS SUPPOSED TO DESTROY
US RESOLVE; INSTEAD IT INSPIRED
VENGEANCE ON AN ALMIGHTY SCALE

By 10am, the first Japanese aircraft began arriving back at their carriers, now lying just 300 kilometres north of Oahu, with the second wave of planes following closely behind. Despite insistent pleas from Commander Fushida – who had led the first wave – to launch the third part of the assault, Admiral Nagumo decided against it. Unsure of the location of the American aircraft carriers, he was unwilling to risk it for fear of being spotted and attacked from the air, so he withdrew. The Japanese fleet retreated back into the vast blue expanse from which it had appeared just hours earlier.

On Hawaii, however, the local population were steeling themselves for an invasion as

rumours of Japanese paratroop assaults and amphibious landings spread. At 12.30pm, the Honolulu Police Department raided the Japanese Embassy in the Hawaiian capital to discover diplomats busily burning documents. Meanwhile, government agents began raiding the homes of Hawaii's sizeable Japanese community, seizing domestic radio sets for fear that they might be used to communicate with Japanese forces in order to help coordinate further attacks. Later that day, after consulting with President Roosevelt over the phone, Hawaii's governor Joseph Poindexter declared Hawaii (not then a US state) be placed under martial law, handing full control of the island over to the American military.

December 7th, 1941

PROPOSED MESSAGE TO CONGRESS

Yesterday, December 7th, 1941 – a date which will live in infamy – the United States of America was suddenly and deliberately attacked by naval and air forces of the Empire of Japan... The attack yesterday on the Hawaiian Islands has caused severe damage to American naval and military forces. I regret to tell you that very many American lives have been lost...

Yesterday, the Japanese government also launched an attack against Malaya. Last night, Japanese forces attacked Hong Kong. Last night, Japanese forces attacked Guam. Last night, Japanese forces attacked the Philippine Islands. Last night, the Japanese attacked Wake Island. And this morning, the Japanese attacked Midway Island.

Japan has, therefore, undertaken a surprise offensive extending throughout the Pacific area. The facts of yesterday and today speak for themselves. The people of the United States have already formed their opinions and well understand the implications to the very life and safety of our nation... I ask that the Congress declare that since the unprovoked and dastardly attack by Japan on Sunday, December 7th 1941, a state of war has existed between the United States and the Japanese Empire.

Franklin D. Roosevelt



Thousands of US citizens of Japanese origin were forced into internment camps after the attack

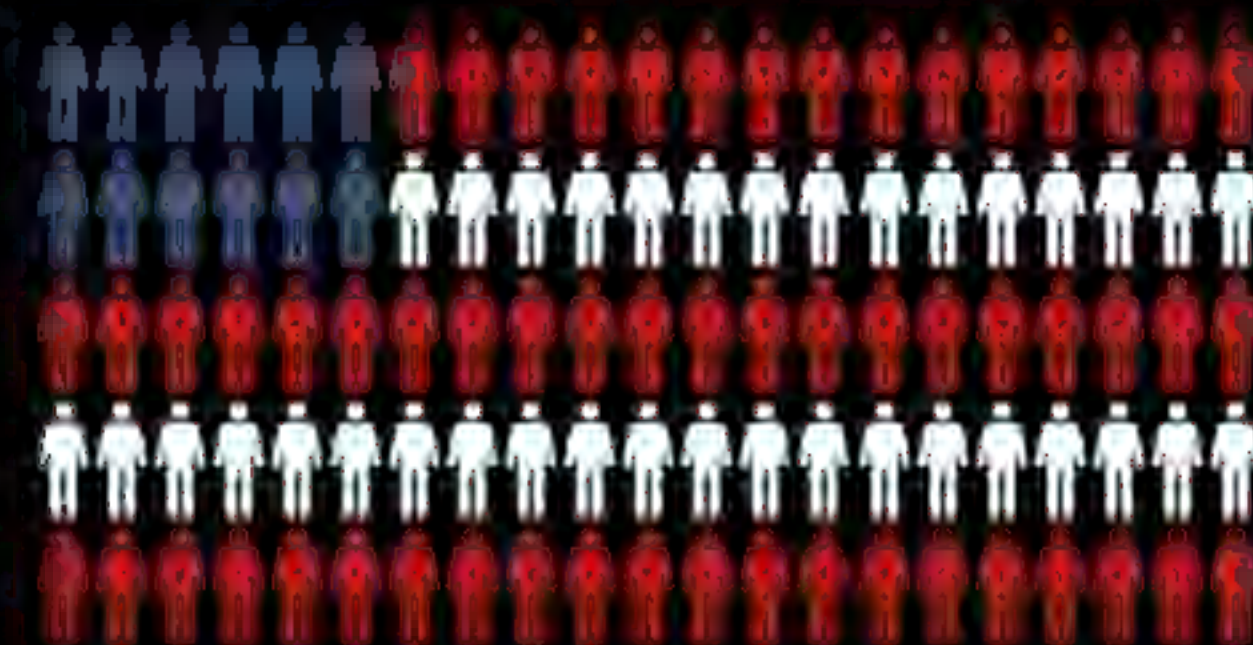
Oahu, meanwhile, was a chaotic mess. The wreckage of burned-out aircraft littered airstrips, buildings – both military and civilian – were left shattered and charred, while hospital staff struggled to cope with thousands of casualties. At Pearl Harbor, rescue workers toiled ceaselessly to save the lives of the 461 men trapped in the overturned Oklahoma. After hours of desperate attempts, just 32 sailors would eventually be pulled from the capsized battleship.

The following day, Roosevelt addressed a joint session of the United States Congress and delivered his famous speech (left).

Prior to the attack, the United States of America had been a divided nation. Still recovering from the aftershocks of the 1929 Wall Street Crash and the subsequent Great Depression, it now became galvanised. Overnight, opposition to American involvement in what was now clearly a world war evaporated as the country patriotically

REMEMBER PEARL HARBOR

IN NUMBERS



3,581

Number of US casualties at Pearl Harbor

68

civilians were killed in the raid

347



US aircraft were destroyed or damaged during the raid

29

Japanese planes were destroyed in the attack

32

out of the 461 sailors trapped in the hull of the capsized Oklahoma were saved

1

Just one Japanese prisoner was taken

90

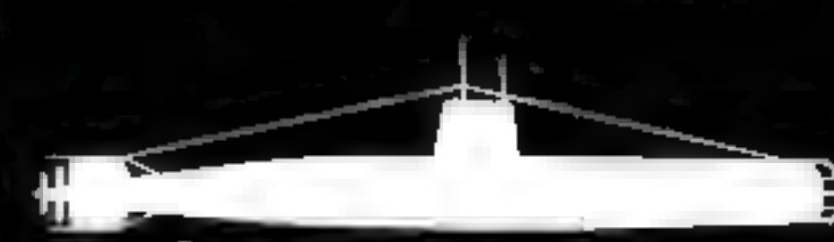
MINUTES

19



US warships and auxiliary ships were destroyed or damaged during the attacks

5



Japanese mini subs also participated in the attack. Four were destroyed and one captured

responded to the call to "Remember Pearl Harbor!" In fact just one member of the US House of Representatives voted against Roosevelt's appeal for Congress to declare war on Japan.

The United States' economy was switched into overdrive as it geared up to produce an overwhelming amount of arms and munitions. It was the birth of what would come to be known as the country's military-industrial complex.

Three days later, Japan's allies Germany and Italy declared war on the United States, and for the second time in less than a week, Congress again voted for war. More than two years after the start of hostilities, the United States had finally joined the fight that would consume the world.



THE 'DAY OF INFAMY'

8 December 1941

The day after Japan had attacked the US at Pearl Harbor, the nation once again found itself reluctantly drawn into a global war. President Roosevelt addressed both the House and the Senate, telling them that while relations between the two Pacific nations had once been positive, now was the time to act against their aggressors, because US interests were in peril. "Japan has, therefore, undertaken a surprise offensive extending throughout the Pacific area," he said. Claiming that he had the bulk of public opinion behind him, Roosevelt went on to assure the government that "the American people in their righteous might will win through to absolute victory". War was officially declared on Japan half an hour after Roosevelt's speech.



BEYOND HAWAII

THE INFAMOUS EVENTS AT PEARL HARBOR TEND TO MONOPOLISE OUR ATTENTION, BUT THEY WERE ONLY ONE ASPECT OF JAPAN'S BOLD ATTEMPT TO TRANSFORM THE MILITARY LANDSCAPE OF THE PACIFIC

WORDS BY JON WRIGHT



If you were in the business of inflicting devastating blows on the Allies, of securing your homeland with a formidable territorial perimeter, and of seizing much-needed economic assets, then an attack on far-distant Hawaii did not quite fulfil all of your requirements. Targets closer to home also had to be considered. This is precisely what Japan did, often at the very moment when its forces were headed for Pearl Harbor. The campaign proved to be remarkably successful.

GUAM AND WAKE

Everyone knew what was likely to happen to Guam if Japan and the United States ever went to war. This isolated American outpost had suffered from neglect during the 1930s but it could still claim strategic value and Japan would be only too pleased to seize it if – let's say – the US was temporarily distracted by a devastating assault on Pearl Harbor.

Franklin D Roosevelt had urged Congress to strengthen the island's defences but his pleas had fallen on deaf ears. Instead, with the threat of conflict looming ever larger, the wives of American soldiers and sailors were evacuated and, as late as 6 December, classified papers were being destroyed just in case the Japanese managed to capture the island. Washington – or a clear majority of its movers and shakers – was convinced that, should the worst come to the worst, little could be done to save the island. Guam was a lost cause before the first Japanese ships and planes edged over the horizon.

The inevitable happened with alarming speed. Within a few hours of the Pearl Harbor onslaught, the island's 400-or-so military personnel found themselves in the thick of things. Japanese aircraft, despatched from Saipan, rained down havoc. The only US ship with anything close to formidable weaponry – USS Penguin – was scuttled and Guam's guns (many of which were a long way from peak efficiency) only made a few dents in the plans of the advancing Japanese forces.

Within a couple of days, the battle for Guam – more of a skirmish, in truth – was over. Japanese troops launched an amphibious assault in the early morning of 10 December and by 6am the US commander, George McMillin, had surrendered. Some wondered if even this much resistance hadn't been rather futile but at least the casualty rate had been



The Grumman Wildcat: a plane that was widely used during the Japanese assault against Wake Island

Right: The devastating raids on Hawaii, Guam and elsewhere pushed the United States to finally declare war on Japan

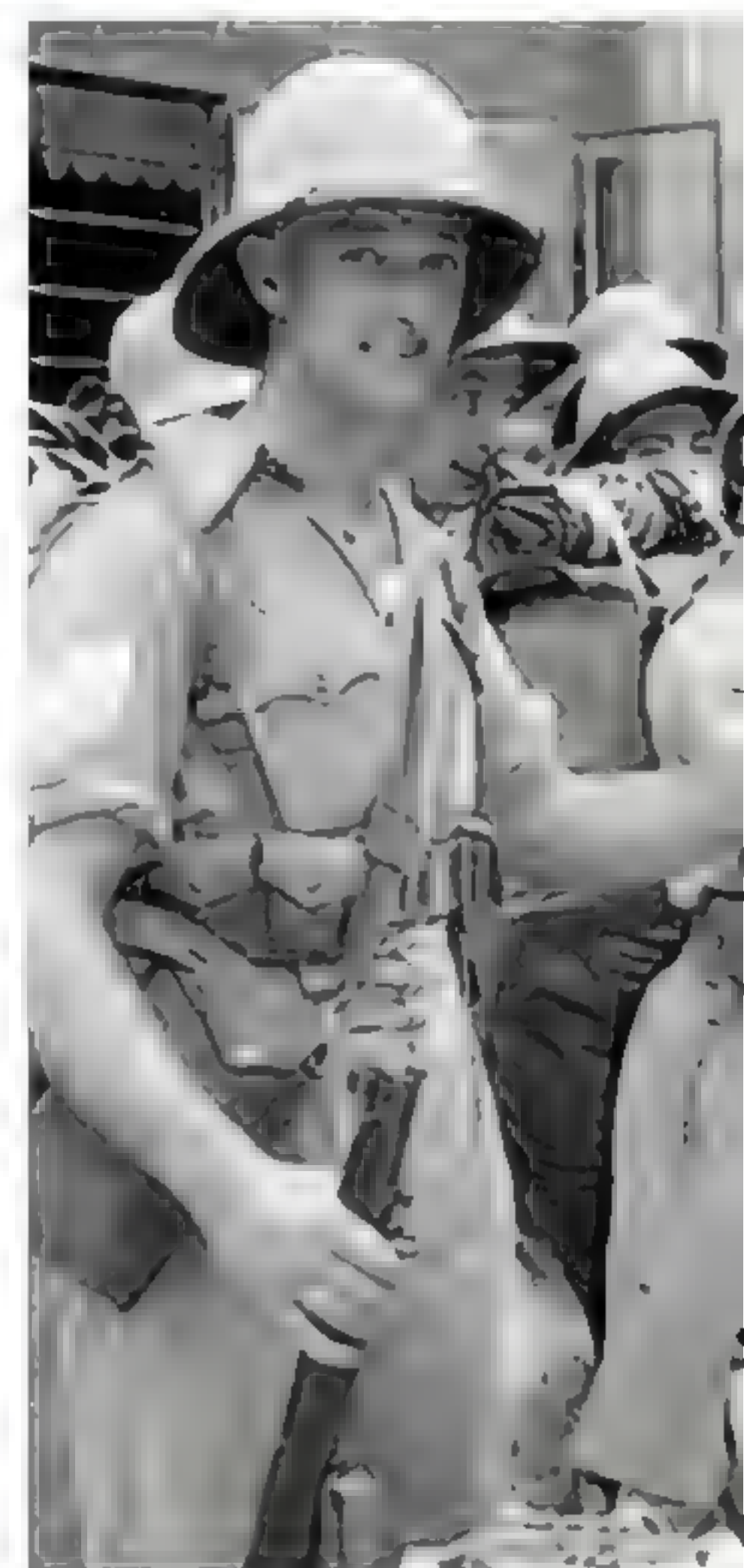
DAILY NEWS FINAL

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JAPAN AT WAR WITH U.S.

HAWAII AND GUAM BOMBED; 104 DIE FLEET HITS BACK

Continues on pages 2 and 3.





fairly low: 19 military and an uncertain number of civilians lost their lives.

The fall of Guam was a blow to American pride but events at Wake Island, though the end result was not dissimilar, provided a boost to morale. This time around, the American forces mounted a formidable defence that took the Japanese by surprise. Wake was even more isolated than Guam: part of an atoll 3,700 kilometres west of Hawaii that also comprised Wilkes and Peale islets. Unlike Guam, Wake Island was in the ascendant and during the 1930s it had been touted as an increasingly vital strategic possession:

halfway between Guam and Midway, and perfectly situated as a refuelling spot for American planes and ships.

When news of events at Pearl Harbor arrived, the island's personnel rushed to high alert and, to be sure, they had many tasks to occupy their time. The island's transformation into a secure and well-provisioned military outpost was still very much a work in progress. There was no operational radar (a staggering lacuna), many of the defensive guns were incomplete (some even lacked height-finding sights), and the basic business of camouflaging important structures was incomplete. At least a dedicated fighter



squadron of 12 Grumman Wildcats had recently arrived, though only just in the nick of time. The 1,800 men situated at Wake – including 449 marines, 68 members of the navy, and in the region of 1,200 civilian workers – did not lack preparatory chores.

The Japanese forces came into view just before noon on 8 December – this sounds like the day after Pearl Harbor but Wake, like Guam, was on the other side of the International Date Line so, in fact, only a few hours had elapsed. In predictable fashion the Japanese deployed aerial assaults and naval bombardments. The level of destruction was catastrophic: seven of the 12 Wildcat fighters were put out of commission, communications were severed, fires raged, and warehouses crumbled. A second attack on 10 December only added to the carnage.

The incursions were, however, met with spirited resistance. A number of Japanese destroyers were sunk or incapacitated, frantic attempts at repairs were undertaken on the



Newly arrived British troops at Singapore in November 1941



Hearn battery on Corregidor Island: the gun had a range of 26 kilometres

Images: Roland Turner CC BY-SA 2.0 (Grumman Wildcat); JFasang, derivative of Dream CC BY-SA 4.0 (Battle of Hong Kong)



“THE RESOLVE OF THE US FORCES WOULD BE LAUDED AS AN EXAMPLE OF VALIANT RESISTANCE”

island, and the surviving Wildcats engaged in daring, highly effective sorties against the enemy. An initial invasion attempt on 11 December was repulsed and for more than a week the bombing continued. It proved impossible to attempt an evacuation and a promised relief mission from Pearl Harbor made ludicrously sluggish progress only to then end up being abandoned.

In the early morning of 23 December, the Japanese ventured another invasion attempt – this time with 1,500 troops – and, after battling to the best of their abilities, the American forces had little choice but to surrender. A number of civilians were summarily executed and the remaining survivors began their journey towards internment as prisoners of war. 49 marines, 70 civilians and 381 Japanese troops lost their lives during the taking of Wake Island, but the resolve of the US forces would be lauded as an example of valiant resistance against impossible odds.

THE BIGGEST PRIZE OF ALL

In the immediate aftermath of Pearl Harbor, the Japanese were spoiled for choice when it came to additional US targets in the Pacific. Johnston Island, to the southwest of Hawaii, came under heavy bombardment from submarines from 12 December, but the Japanese quickly decided they were making little headway and withdrew.

The Midway Islands, meanwhile, could not be overlooked, so two destroyers and a tanker – with the ominous title of the ‘Midway Neutralisation Unit’ – did their best to inflict damage (the assaults actually began a couple of hours ahead of the strike against Pearl Harbor) but with unimpressive results. The Japanese even found time to bully Thailand – a neutral nation – into forging an alliance. When the Thai government failed to respond to an ultimatum on 7 December (join us or face the consequences), the Japanese sent in troops and secured useful

promises of assistance and unhindered passage of their forces through the country.

All of this was relatively small peanuts compared with the goal of capturing the Philippines, and US bases were coming under air attack just ten hours after the events at Pearl Harbor. On paper, the Americans were in a relatively comfortable position. Their strongholds in Luzon were in good order, tens of thousands of troops were available, and one of America’s most celebrated leaders, Douglas MacArthur, ruled the military roost.

For all that, the Japanese struck quickly and with devastating effect. After just a few days, the Cavite Navy Yard had become an

inferno and the Clark Field air base had been pulverised. With a stroke of infuriatingly bad luck, almost all of the base’s planes were sitting vulnerably on the tarmac when the Japanese arrived. Raids across the Philippines continued (Manila suffered its first major aerial assault on 11 December) and a series of invasionary actions took place during the remainder of the month.

By 28 December, 43,000 Japanese troops had made it ashore. Numerically, this was not a disaster: American manpower, in combination with less well-trained Filipino troops, was still superior. But everything pointed towards an unhappy outcome. Most of the remaining



■ Left: The Invasion of the Philippines. US and Filipino troops made their prolonged last stand on the Bataan Peninsula and Corregidor Island, to the west of Manila

■ Above: British Malaya on the eve of war with Japan



■ Laura Cobb, pictured (centre) in 1945 with the terrors of the past three years finally behind her

THE ANGELS OF BATAAN

The American nurses who witnessed the Japanese invasion of the Philippines first-hand and managed to save hundreds of lives

When the nurses at Sternberg Hospital, Manila, were woken from their slumbers by the shocking news of Japan's attack on Pearl Harbor, they knew what was coming next. Sure enough, the bombs began to fall on the capital city within ten hours and the casualties – both military and civilian – flooded in.

It would be 10 December, in the wake of the destruction of the Cavite naval base, that would prove to be a particularly harrowing day. There was little time for triage and nurses handed out medicine without time to consult doctors. "It was a shocking scene," Dorothy Danner recalled, while Peggy Nash was always haunted by the memory of an injured child asking for a glass of water. "By the time I got back, he was dead. That just about killed me."

After weeks of bombardments, with makeshift wards being set up in schools, barracks and clubs, many of the naval nurses, led by Laura Cobb, remained at their stations even after Manila fell. They were soon found languishing in an internment camp. The army nurses, with Maude Davison and Josephine Nesbitt taking charge, followed the US troops to the fall-back positions at Bataan Peninsula and Corregidor Island. For three months they made do with scant rations and limited medical supplies in horrendous conditions, establishing wards in stinking tunnels. Every one of the 77 'Angels of Bataan' survived and, when the Americans surrendered in April and May 1942, the nurses continued to tend the imprisoned troops until their release three years later.



■ Sternberg Hospital, Manila – the centre of medical activity during the attack on the Philippines

American fleet had hot-footed it to safety and there was little sign of any American relief force. The Philippines' president, Manuel Quezon, complained that the US had "practically doomed [us] to almost total extinction to secure a breathing space". By 25 December, Manila was almost surrounded so the city was abandoned, and US and Filipino forces decamped to the relative safety of the eminently defensible Bataan peninsula and Corregidor Island at the peninsula's southern tip. The Americans held this position with remarkable gusto in terrible conditions ("they were filthy... and they stank... and I loved them," MacArthur commented) but a war of attrition finally paid dividends for the Japanese. The troops on Bataan surrendered on 9 April, with their comrades at Corregidor following suit on 6 May.

FIGHTING THE BRITS

This was, by any measure, a military low point for the US, but the Japanese took aim at other nations, too. Not every Japanese encounter with the British Empire was straightforward – the campaigns in Burma, which also got underway quite soon after Pearl Harbor, turned into a military morass – but some pickings were a good deal easier and, again, many of them were pursued in the immediate aftermath of the raids on Hawaii.

The bombing of Hong Kong began on 8 December and the territory had surrendered by the 23rd, though not before the deaths of 2,000 troops and civilians. The Federated Malay States (or British Malaya) also came into the firing line, not least because the local resources (40 per cent of the world's rubber production and 60 per cent of its tin production) were craved by an economically over-stretched Japan.

70,000 British and colonial troops could be found in Malaya, but this was unlikely to deter Japanese aggression. Bombs began to fall 90 minutes before the Pearl Harbor engagement, troop landings got underway on 8 December, and the British were gradually pushed south, headed for Singapore (which had also suffered its first air raids as early as 8 December). The northerly states fell like dominoes: Kuala Lumpur was taken by mid January and the supposedly safe haven of Singapore, capital of the Straits Settlements, was captured on 15 February.

All told, these had been phenomenally successful weeks for the Japanese. In many ways the attack on Pearl Harbor had been disappointing: the disruption and damage was much less crippling than Japan had hoped. But the well-coordinated campaigns that accompanied or stemmed from that famous event left Japan in an enviable military position across the Pacific. The British and the US were rather stunned by just how badly things had gone for them, and even the poor old Dutch, who declared war against Japan on 8 December, had not emerged unscathed: how, after all, could the Japanese pass up the opportunity to fight for the economic riches of the Dutch East Indies: sugar, coffee, tea and vast reserves of oil? The Allies were decidedly glum in early 1942 but, before too long, the tides of conflict in the Pacific theatre would begin to turn in their favour.

STORMING MALAYA

December 1941

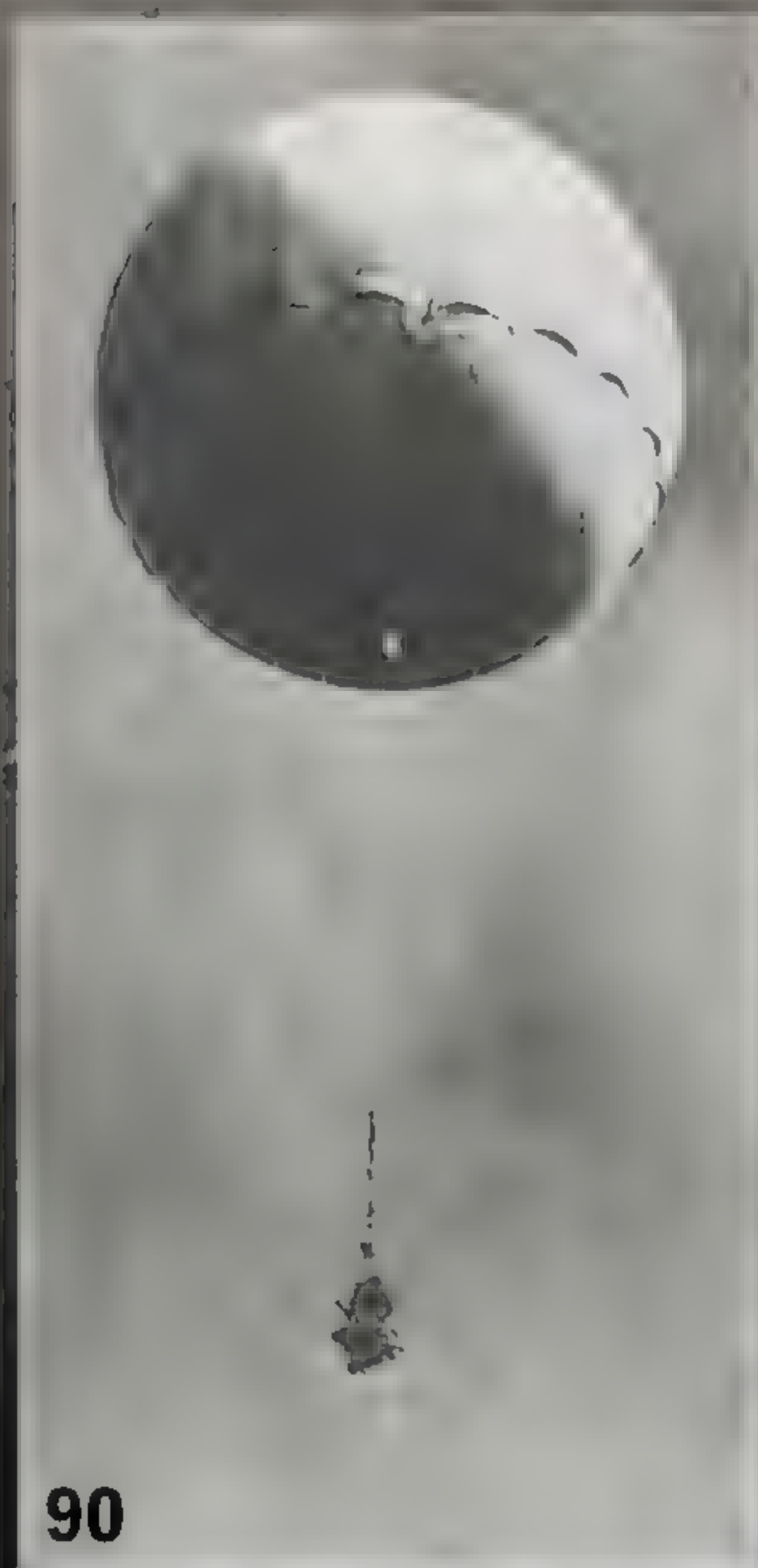
The familiar sight of Japanese troops storming an Allied airfield with their flag aloft after bombing raids and naval bombardments had hammered the enemy into submission. The image of ruined, smoldering planes—this one was taken in Malaya—was replicated in conflicts from Wake Island to Guam to the Philippines.





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104

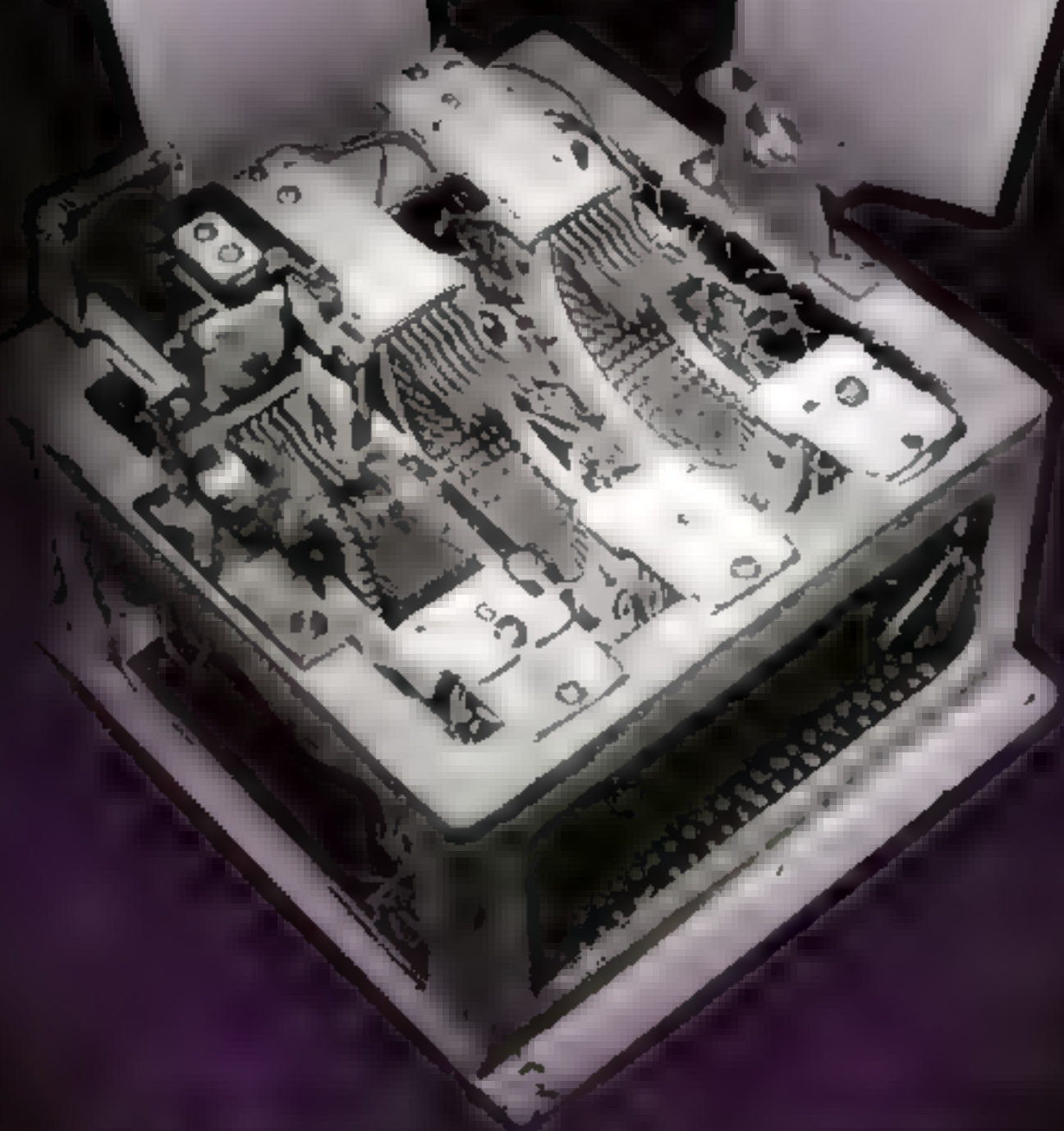


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images: Getty Images (p. 4, p. 54, p. 55), Anwar (p. 55)

JAPAN VS AMERICA



PURPLE

CRACKING JAPAN'S ENIGMA

HOW CODEBREAKERS ACROSS THE ATLANTIC
CAME TO DECRYPT MESSAGES QUICKER
THAN THE ENEMY COULD THEMSELVES

WORDS NATHAN JORDAN



At around 12pm on Saturday 6 December 1941, the Japanese Government in Tokyo instructed its ambassador to the USA, Kichisaburo Nomura, to stand by for a 14-part message. He was ordered to present it to the secretary of state at 1pm the following day, after which he was to destroy the coding machine the message was received on.

Given that it was a weekend, Nomura's Technical Support staff were away, so he and a fellow diplomat had to decode and transcribe the message themselves. The end result was a message that amounted to a Japanese declaration of war, and was delivered after the planned attack on Pearl Harbor, where more than 2,000 sailors were killed and 18 ships were destroyed. The delays in the delivery of the message meant all those killed were officially non-combatants. The Japanese diplomats seemingly had no prior knowledge of the pending attack.

Astonishingly, the officials also had no knowledge that the message they presented to the Secretary of State had already been intercepted by a Navy Station on Bainbridge Island, where despite being protected by Japan's most sophisticated cipher machine, it was rendered into English by the US Signals Intelligence Service (SIS).

Tragic delays meant that the intercepts and decoding didn't take place in time to prevent the attack, nor did any intercepted messages reveal plans to attack Pearl Harbor specifically.

PURPLE HAZE

The cipher machine used to encode the message to Ambassador Nomura was known as the 97-shiki O-bun In-ji-ki (97 Alphabetical Typewriter). The number for the device was derived from the year 2597, according to the Japanese Imperial calendar, in which the device was built (or 1937 CE).

The 'Purple' machine, as it was known in the USA, was a successor to the previous 'Red' cipher machine, which in turn was based on a commercial version of the infamous German Enigma machine. Collectively the information gleaned from Japanese intercepts was codenamed 'Magic' – material that was placed into colour-coded binders, hence the names.

Unlike Red, which used half rotors that required cleaning daily, Purple made use of more-reliable telephone stepping switches. In brief, the Purple machine consisted of two electric typewriters, joined by a cryptographic assembly for encoding/decoding messages. The second typewriter could print messages onto a piece of paper, which was a colossal improvement on early Enigma machines that used lamps to spell out the message. This meant that no second operator was required to transcribe messages as they were received. Another advantage of the Purple machines was that they could send and receive messages both in English and Romaji, a system for writing Japanese in the Roman alphabet.

Theoretically the level of security offered by Purple was very high, as the initial settings, including the rotor positions and dual plugboards, offered more than 70 trillion combinations for the initial settings. But as much as the Japanese believed Purple to be secure, the plugboards and typewriters combined with printing apparatus resulted in a rather bulky machine that made it impracticable for the field, so it was reserved for high level diplomatic communication.

It was this, rather than the complexity of the machine itself, that initially stymied the efforts of SIS, who had started monitoring Purple traffic when it had first appeared in February 1939. Codebreaking up to that point had relied on the fact that after sending thousands of messages with the same key settings, cipher machines would eventually repeat sequences of letters, which was less likely to happen with occasional diplomatic cables. As a result, it wasn't until

"TRAGIC DELAYS MEANT THAT THE INTERCEPTS AND DECODING DIDN'T TAKE PLACE IN TIME TO PREVENT THE ATTACK"



Members of the SIS posed in front of their vault, 1935. Present are William Friedman (centre, standing) and Frank Rowlett (far right)



■ Japan's alliance with Germany led to unintentional intelligence leaks once Purple had been cracked

1940 that Purple transmissions could be broken and read regularly.

The Japanese also did not rely on the Purple machine alone to protect their messages. To encipher a message, a clerk would firstly encode it using a commercially available cipher known as the 'Phillips Code'. This wasn't to obfuscate the message, so much as to save time by shortening common terms – for instance, the word 'execute' was converted to 'Xk'. The clerk would then select a letter sequence from a book of 1,000 codes that were changed daily to determine the machine plugboard's initial settings, as well as choosing at random from another list of 240 separate settings, which would decide the keys used by the stepping switches.

BREAKING PURPLE

The 18-month effort to break Purple was spearheaded by William Friedman, who set up a special team named the 'Purple Section'

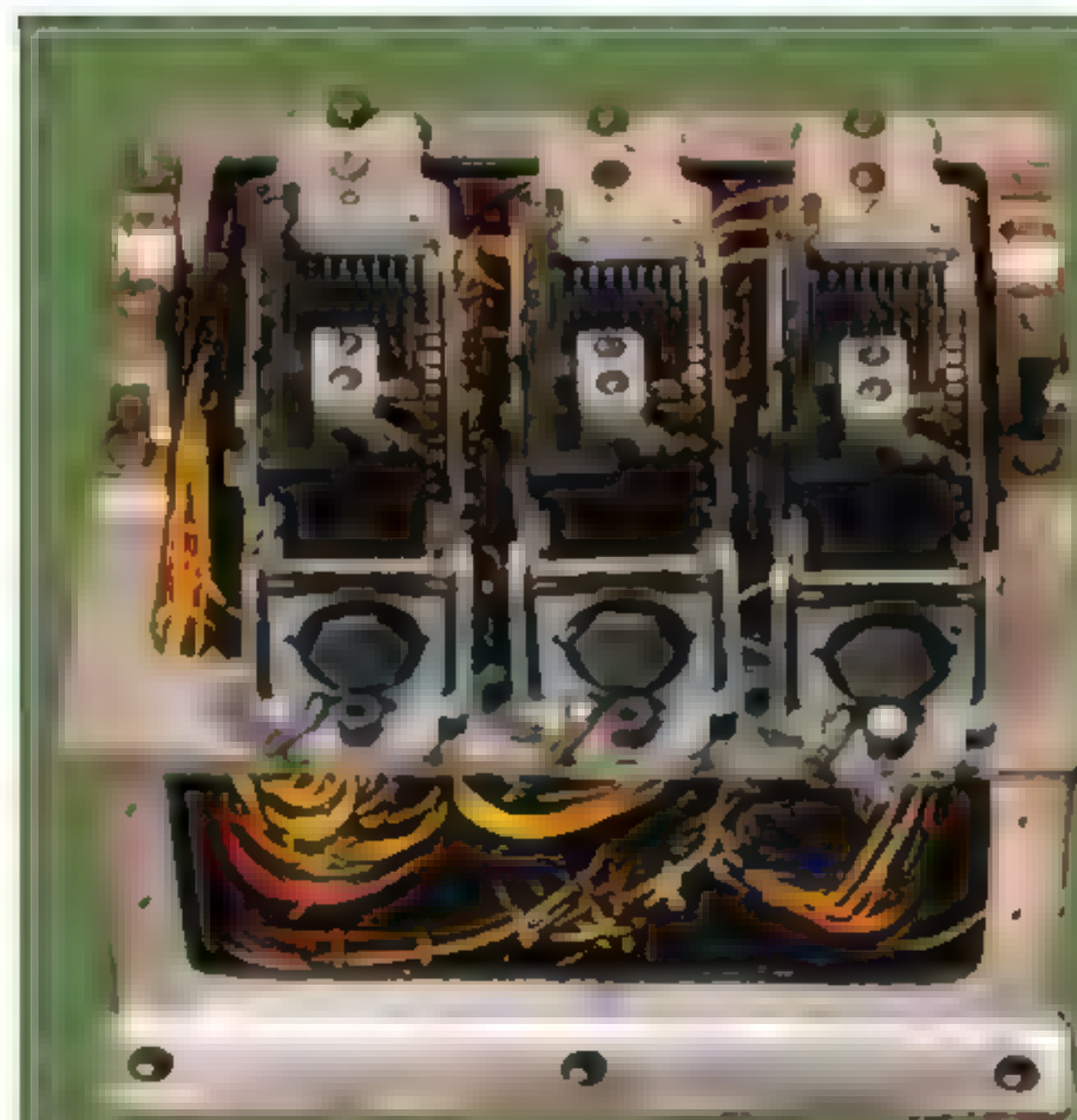
“UNLIKE THE BRITISH CODEBREAKERS AT BLETCHLEY PARK WHO HELPED BREAK ENIGMA, SIS HAD NO COMMERCIAL MODEL, PHOTOS OR BLUEPRINTS OF THE PURPLE MACHINE”

at SIS Headquarters in Constitution Avenue, Washington, DC. Purple Section was led by brilliant mathematician Frank Rowlett, who, while having no experience with codebreaking, eagerly accepted the job, as the salary offered was more than the combined income he and his wife had been earning until then as schoolteachers.

Rowlett's team discovered that like its predecessor, the Purple machine enciphered six of the letters of the alphabet separately to the rest. This allowed Rowlett to draw up a pen-and-paper deciphering chart with various columns displaying the cipher alphabets used. This was a key weakness of Purple, as once six letters of a message have been encoded it was easy to make intelligent guesses about the remaining words.

The rigid, stylised nature of Japanese diplomatic communications, which often contained expressions such as “Your Excellency” made the codebreaking efforts even easier and, like a crossword, as more letters were filled in, SIS was able to decipher more of each message.

The Purple machines were complex, ungainly and expensive, meaning that the Japanese often used the older Red machines for sending the same messages. This was surprising given that the Japanese had built Purple precisely because they suspected Red traffic could be broken. Not only did it make the initial message easier to decode, but it allowed SIS to determine the key settings for the Purple machines more easily, allowing them to decode other messages.



■ This fragment of an original Japanese Type 97 'Purple' cipher machine is on display at the National Security Agency's National Cryptologic Museum located in Fort Meade, Maryland

THE EMPEROR'S NEW CODES

From Red and Blue to Purple – how did this nightmarish upgrade to Enigma conceal Japanese transmissions?

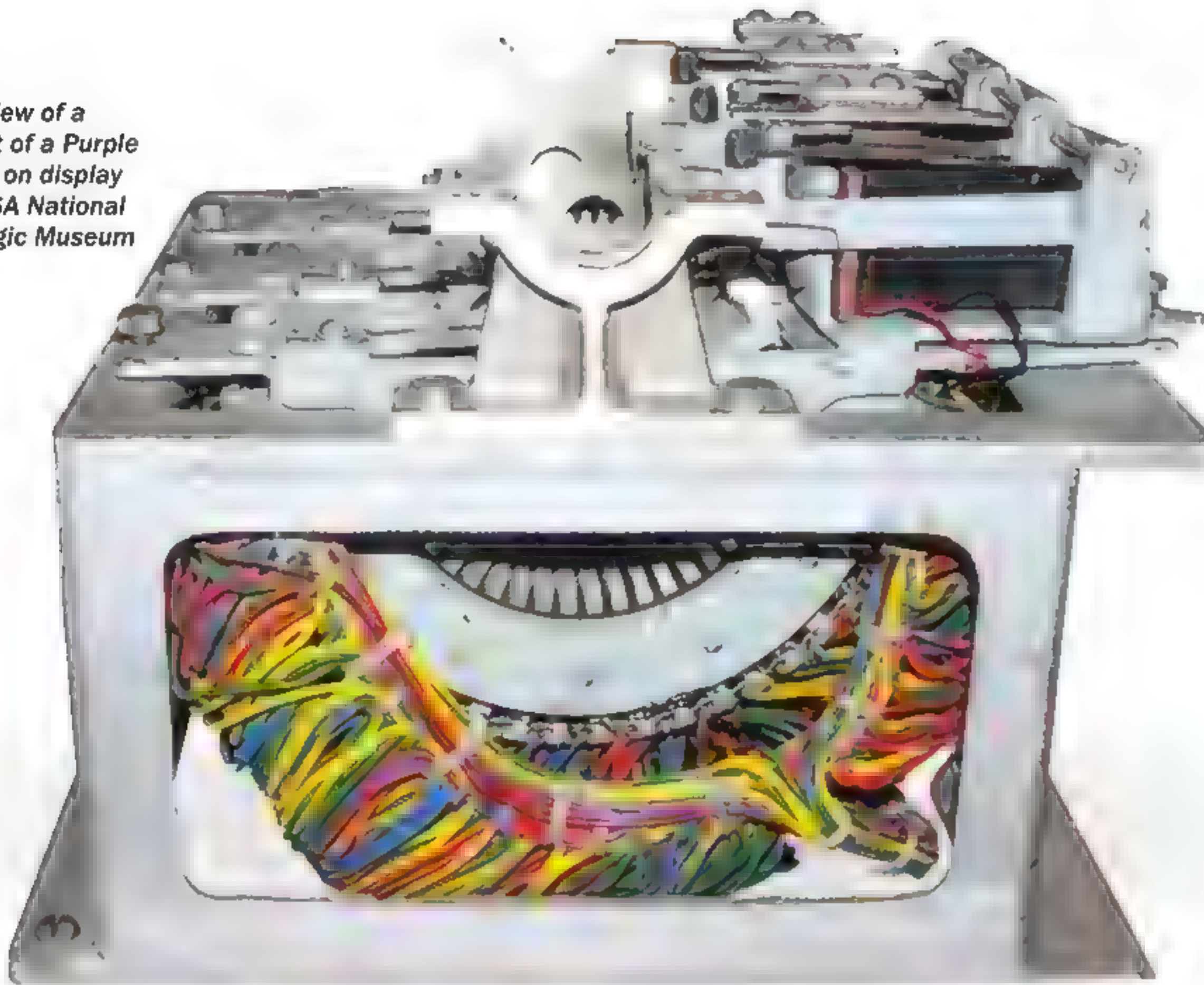
The Purple Machine combined two electric typewriters for inputting and printing out messages, meaning a single person could operate it. Pressing a key would send an electrical signal to the cryptographic assembly. This consisted of a plugboard, four electrical coding rings and various wires and switches. The Enigma plugboard paired letters on its plugboard – for instance the letters E and O might be swapped around. Purple was more fiendish, in that it contained input and output plugboards. This supported any permutation of letters. For instance, the fact that the letter E enciphered as letter O, did not necessarily mean O would decipher to E.

Instead of using clunky rotors that moved with each key press, the Purple Machine used four electro-mechanical 'stepping switches'. The SIS codebreakers assigned the letters S, L, M and R to each of these. Each of them had 25 hard-wired

but different permutations of letters. Like its 'Red' predecessor, Purple divided the letters of the alphabet into two groups. The first group of letters was known as the 'Sixes' and the second group known as the 'Twenties'. The 'Sixes' letters were enciphered using only Switch S – this would move forward exactly one place for each letter typed – while the 'Twenties' letters were enciphered using the other three stepping switches – L, M and R. At least one of these would move one step as each letter is typed. Which switch moved was determined by the movement of the S switch combined with the initial machine settings.

Although this sounds convoluted, the actual process was transparent to the operator who would simply set up the machine according to the settings in the available code book and input each plain text letter. This would then be sent to the plugboard before being enciphered again by the stepping switches.

■ Side view of a fragment of a Purple machine on display at the NSA National Cryptologic Museum



PURPLE ANALOGUE

While the Japanese were obliging enough to encode messages with the Red machine or include predictable words, at first any efforts at codebreaking amounted to little more than guesswork. Had Purple been used for military messages, it's likely that thousands would be sent per day, meaning the initial settings would be easier to calculate because the relationship between sequences of enciphered and 'plain text' letters could be calculated.

Using the small number of diplomatic messages they had access to, Purple Section team member Genevieve Grotjan had a flash of inspiration on 20 September 1940 by discovering repeated sequences in a number of messages – the internal workings of Purple had been solved on paper.

The entire section decided to celebrate quite salubriously by ordering in bottles of Coca Cola for everyone. Grotjan herself was posthumously inducted into the National Security Agency's Hall of Honor in 2010 after her death in 2006, for this and other achievements. Unfortunately, the strain of the past 18 months proved too much for William Friedman, who suffered a nervous breakdown and was forced to rest for several months.

In Friedman's absence, MIT-educated army officer and engineer Leo Rosen used paper diagrams from Rowlett, Grotjan and Friedman himself to construct an exact working replica of Purple that mirrored the wiring of the machine.

This device was actually an improvement on a prototype machine devised by Rosen. He formed the idea for this first device, dubbed the "six buster" while leafing through an electrical supply catalogue. As he idly turned the pages he came across a device known as the 'uniselector' which consisted of six telephone stepping switches. Thanks to the efforts of Grotjan and the rest of Purple Section, the wiring for the other 20 letters of the alphabet was now plain, allowing Rosen to build on his original machine by soldering over 500 new connections to various stepping switches.

Unlike the British codebreakers at Bletchley Park who helped break Enigma, SIS had no

commercial model, photos or blueprints of the Purple machine. They inferred everything about the machine's functions from intercepting and decoding its messages.

The new Purple replica was put to good use in decrypting all messages received to date, as it allowed for checking various settings much faster than using pen and paper and in time, six more replica machines were built.

AFTERMATH

Once functioning replicas of Purple were available, the task of decoding messages was streamlined, further aided by the predictable way the Japanese sent messages and the fact that they only used 240 possible key settings from a potential pool of nearly 400,000. Purple Section often decoded messages faster than the Japanese embassies themselves, who knew the correct settings.

But Purple traffic wasn't only useful for obtaining intelligence on the Japanese – Ambassador Baron Hiroshi Oshima, a confidant of Hitler's, served as an unwitting collaborator with the Allied cause by making visits to the Eastern Front and Atlantic Wall. As a dogged and routine military man, the former general provided painstakingly detailed reports on a lot of Nazi leadership plans, as well as the 'TO' Japanese spy network in Spain by radio to Tokyo, which were eagerly deciphered by the workers in Purple Section.

Although Japanese faith in the security of Purple was unshaken, before surrendering, their government sent covert orders to their Embassies to destroy all Purple machines by grinding them to particles. A fragment of one was recovered from the Japanese Embassy in Berlin at the end of the War. The former Purple Section were astonished to discover it used the very same component Leo Rosen had selected for SIS's replica machine while leafing through his electronics catalogue years ago.

This uncanny coincidence is not only a testament to Purple Section but underscores the combination of brute effort, coincidence and raw mathematical skill that were needed to break wartime codes.

AMERICA'S CODE-CRACKER

Meet the 'dean' of modern American cryptology

After breaking field codes used by the Germans in World War I in 1920, William Friedman penned his first of many revolutionary codebreaking manuals, *The Index of Coincidence and its Applications in Cryptography*. It detailed a technique known as 'coincidence counting', which would later be applied to breaking Purple.

In 1923, while working as chief cryptanalyst for the War Department, Friedman published *Elements of Cryptanalysis*, a manual that would later be expanded into a four-volume work. It rapidly became the American army's cryptographic Bible.

In 1924, at the request of the navy, Friedman tackled messages from a five-rotor cipher machine invented by Californian Edward Hebern. Friedman was able to crack messages by printing the letters on strips of paper, then sliding them back and forth until he observed 'coincidences' in one column or another.

After the strain of breaking Purple told on Friedman, he was hospitalised in 1941 and was honourably retired from the Signal Corps reserve. He continued to serve as director of communications for SIS and after the war became chief of the technical division for the Armed Forces Security Agency. He then served as a technical consultant for the fledgling NSA in 1952. It was only after this move that the American government realised that due to an oversight, Friedman never actually had full security clearance.

In 1946, President Truman awarded Friedman the Medal of Merit for "exceptionally meritorious conduct". For obvious reasons, the exact nature of his contributions couldn't have been made public at the time.



■ Friedman continued to publish works on cryptography up until his death in 1969

JAPAN VS AMERICA

THE

FLYING



TIGERS



HOW THE OUTNUMBERED FIGHTER ACES OF THE AMERICAN VOLUNTEER GROUP DEFIED IMPERIAL JAPAN IN WAR-TORN CHINA

■ Left: The ferocious mouths painted on the nose were inspired by the tiger sharks painted by RAF pilots in the Mediterranean theatre on their planes



They expected a routine mission. Japanese planes owned the skies over China, but the pilots and crewmen who boarded the ten Mitsubishi Ki-21 twin-engine bombers on the morning of 20 December 1941, intended to cover the 300 air miles from their base at Hanoi to the Chinese city of Kunming, drop their incendiaries and 500-pound bombs, and return unscathed.

There was no need for a fighter escort. For a decade the armed forces of Imperial Japan had been at war on the Asian continent. They staged the Mukden Incident in 1931 as a pretext to seizing the northern province of Manchuria from China, and another so-called 'incident' in 1937 at the Marco Polo Bridge, near the city of Peking, to escalate the simmering conflict into what became known as the Second Sino-Japanese War. The Chinese resisted bravely on land and in the air. However, the resources of

the Nationalist government of Generalissimo Chiang Kai-shek were few and often ineffective in the face of the Japanese onslaught.

Nowhere was the military contest more unequal than in the air. The Japanese flew modern planes, their pilots were well trained, and with each mission their confidence grew. Japanese fighter pilots regularly shredded the defending planes of the Republic of China Air Force, most of which were obsolete American-designed Curtiss BF2C Goshawk biplanes along with a few British, Italian, and Soviet types. Chinese pilots were often the sons of wealthy, influential families who graduated from flight training with wings pinned to their chests regardless of proficiency.

These ill-prepared fliers were often killed, their valuable aircraft destroyed in takeoff and landing incidents, while those who managed to engage in aerial combat fell to Japanese guns at an alarming rate. By 1941, although the Republic of China Air Force officially listed a complement of 500 planes, which was probably overstated, barely 90 aircraft were considered battleworthy at any given time.

However, during that morning mission to Kunming, the Japanese were made keenly



■ Chinese soldiers and armourers of 74th Fighter Squadron inspecting a Curtiss P-40 in Kunming, China, 1 February 1943

aware that the situation in the skies above China, and neighbouring Burma, had been dramatically altered. As they approached their target, the Japanese pilots spotted something unusual. Four tiny dots were rapidly bearing down on them, and it was soon apparent that these were hostile fighter planes. The Japanese released their bombs 30 miles southeast of Kunming and turned for home at high speed.

These unexpected attackers were, in fact, Curtiss P-40 Tomahawk fighters led by Lieutenant John V 'Scarsdale Jack' Newkirk. Ten more P-40s joined the pursuit, and one by one the Japanese bombers were shot to pieces, exploding in midair or trailing thick, black smoke as they spiralled into the ground. A single bomber survived to report the details of the harrowing mission. The crewmen described their attackers as heavy, single-engine fighters with snarling shark's mouths painted on their engine cowlings. Their comrades had been the first victims of the flamboyant airmen of the American Volunteer Group (AVG), popularly known as the Flying Tigers.

The initial aerial combat mission of the Flying Tigers had been a resounding success, and newspaper reports flashed across the globe. This provided a much-needed morale boost for the American public, still stunned by the sudden attack on Pearl Harbor that had plunged the nation into World War II only two weeks earlier, and offering hope to the beleaguered Chinese.

For years, Chiang Kai-shek had realised that he needed help from the United States to stem the Japanese tide. However, a major obstacle to securing American aid was the

"ONE BY ONE THE JAPANESE BOMBERS WERE SHOT TO PIECES, EXPLODING IN MIDAIR OR TRAILING THICK, BLACK SMOKE AS THEY SPIRALLED INTO THE GROUND. A SINGLE BOMBER SURVIVED TO REPORT THE DETAILS OF THE HARROWING MISSION"

simple fact the country was not a belligerent during the 1930s. An overt act to provide military support to China might, in fact, provoke the Japanese into declaring war on the United States. Nevertheless, Chiang possessed two quite powerful assets in his quest for American assistance. His wife, Soong Mei-ling, also known as Madame Chiang, was a charming and shrewd political pragmatist, while the Nationalists also benefited from a powerful lobby in the United States led by her brother, TV Soong, who moved easily through the halls of power in Washington, DC.

Madame Chiang was charged with raising the combat prowess of the Republic of China Air Force, and she proved quite capable in the role. Without doubt, her most significant accomplishment was in persuading a grizzled American captain to come out of retirement in Louisiana, travel halfway around the world, and take on the monumental task of revitalising that flagging fortunes of the Chinese air arm.

Claire Lee Chennault was a veteran of the US Air Corps and a former stunt flier. To the detriment of his career, he had also been a tireless, vocal champion of developing fighter aircraft and tactics, during an era that was dominated by senior officers who promoted the

deployment of heavy bombers bristling with guns. The prevailing sentiment among these officers was that the big bombers could defend themselves without the help of fighter escorts, pound enemy cities and military targets, and actually win a modern war by raining devastation from the skies.

Chennault never bought into that concept and argued forcefully against the prevailing fighter tactics that emerged during World War I. "There was too much of an air of medieval jousting in the dogfights," he said boldly, "and not enough of the calculated massing of overwhelming force so necessary in the cold, cruel business of war." He believed that fighter pilots should work together in pairs and in larger numbers rather than as lone hunters, and in 1935 he put his theories on paper in the book *The Role of Defensive Pursuit*.

Within months of his book's publication, Chennault was serving as an instructor at Maxwell Field, Alabama. He was notified that the teaching of fighter tactics was to be terminated. Suffering from hearing loss sustained during hours of flying in open cockpits along with chronic bronchitis, Chennault retired with 20 years of service in 1937, still a junior officer at the age of 47.



■ A Chinese soldier stands guard over a P-40E Warhawk. The plane was flown by Major John Petach who accumulated 5.25 kills

Although few in Chennault's own country had paid any attention to his fighter doctrine, General Mao Pang-tso of the Republic of China Air Force attended one of his flying demonstrations and passed along his favourable impressions of the American pilot's skills. It was then that Madame Chiang charmed Chennault, who visited the country in the spring of 1937 during negotiations to procure his services. He later remarked, "She will always be a princess to me."

In his own way, Chennault learned to manipulate Madame Chiang, tendering his resignation to her when the Nationalist government moved too slowly regarding some issue or failed to provide support in a timely manner. Madame Chiang always refused to accept the commander's resignation, and she remained his foremost advocate during later contentious disagreements with General Joseph Stilwell, the American commander in the China-Burma-India Theater (CBI) during World War II. Through his association with Madame Chiang, and the exploits of the Flying Tiger pilots, he would soon command. Chennault became one of America's early heroes of the war, exerting tremendous influence on its conduct in the CBI.

Chennault took to his initial task with renewed vigour, enhancing the training of Chinese pilots and establishing an early warning network to alert his bases to incoming Japanese air raids. Among the formidable enemy aircraft his pilots faced was the Nakajima Ki-27 fighter, which was introduced in 1937, and later the Nakajima Ki-43 and the legendary Mitsubishi A6M Zero.

Chennault admonished his pilots to be wary of the nimble enemy planes and to avoid single combat. "Never get into a dogfight with the Zero," he told them. "When you spot the Zeroes, make one diving run with guns blazing, and then get the hell out of there!"

Chennault did his best, but Japanese air power was overwhelming, and large formations of enemy bombers hit Chinese cities at will while fighter planes strafed Chinese troops on the ground. As the situation worsened, Chiang Kai-shek turned to his brother-in-law. Soong persuaded President Franklin D Roosevelt to allow Chennault to quietly recruit American pilots and to eventually purchase 100 new Curtiss P-40 fighters for these 'volunteers'. The planes had been earmarked for the British through the Lend-Lease program but were considered outdated and rejected for service with the RAF.

Six months prior to Pearl Harbor, Chennault had successfully recruited 112 American pilots, who were allowed to resign from the US armed forces and join the Chinese with the promise that they could return to the American military if the US became a belligerent or when their contracts with the Chinese were completed. The lure of adventure and a fat paycheck weighed heavily in the decisions of these young men. The American Volunteer Group paid \$750 a month to a squadron leader, \$675 to a flight leader, and \$600 to a wingman. Ground crewmen were compensated handsomely from \$150 to \$300 a month depending on an individual's skill set. To sweeten the pot, the Generalissimo added a \$500 bounty for every confirmed shootdown of a Japanese plane.

CBI AIR RAGE

Flying Tiger pilots in their Curtiss P-40 Warhawk fighters fought superior numbers of Japanese planes above China and Burma

CURTISS P-40 WARHAWK

Fast in level flight and capable of out-diving the Japanese fighters that the pilots of the American Volunteer Group faced, the Curtiss P-40 fighter was well suited to the 'boom and zoom' tactics advocated by Flying Tiger boss Claire L. Chennault.

YEARS IN SERVICE: 1939-1945
MAX SPEED: 580 KM/H (360 MPH)
ARMAMENT: SIX .50-Z (12.7MM)
BROWNING M2
MACHINE GUNS



NAKAJIMA KI-27

Lightly armed and armoured, the Nakajima Ki-27 fighter, nicknamed 'Nate' by the Allies, was highly manoeuvrable and easily out-turned Allied opponents flying Curtiss P-40s in a dogfight. However, it was rapidly outclassed by other aircraft types early in World War II.

YEARS IN SERVICE: 1937-1945
MAX SPEED: 470 KM/H (292 MPH)
ARMAMENT: TWO 7.7MM TYPE 89
MACHINE GUNS



"THE NAKAJIMA KI-27 FIGHTER WAS HIGHLY MANOEUVRABLE AND EASILY OUT-TURNED ALLIED OPPONENTS"

MITSUBISHI A6M ZERO

One of the legendary fighters of World War II, the Mitsubishi A6M Zero was highly manoeuvrable, heavily armed, and superior to early Allied types. ROC Air Force pilots faced the Zero, but debate continues as to whether Flying Tiger pilots did.

YEARS IN SERVICE: 1940-1945
MAX SPEED: 534 KM/H (332 MPH)
ARMAMENT: TWO 7.7MM TYPE 97
MACHINE GUNS; TWO 20MM TYPE
99-1 CANNON



In the interest of operational secrecy, the American pilots were provided with fake documents and information that presented them as individuals with occupations from engineers to tailors and Vaudeville performers. "I joined the AVG in July 1941," remembered Donald Whelpley, who became the group's lead meteorologist. "At that time my duty assignment was Navy meteorologist to Patrol Squadron 54, Naval Air Station, Norfolk, Virginia," he continued. "When the Navy finally realised that I was serious about resigning my commission to join Chennault in China, they released me for a one-year tour with the AVG. Little did any of us realise what we had gotten ourselves into."

The recruits sailed to China and maintained their cover. Some of them posed as employees of the Central Aircraft Manufacturing Company (CAMCO), which operated a facility in Burma that assembled planes for the Chinese. By the summer of 1941, Chennault was putting them through their paces at an airfield in Loiwing, China, near the border with Burma.

A remedial training school was established after it was discovered that some of the recruits had lied about their experience in 'pursuit planes' and had only flown bombers or transports. Chennault lectured the aviators regularly, often using a chalkboard to illustrate his points, and shook his head in despair when one of his precious P-40s was damaged in training. The young pilots embraced Chennault's teachings and began referring to the commander as 'Old Leatherface'.

The AVG's P-40s were shipped in crates from New York, but even before they were assembled and took flight, one of the planes met an unfortunate fate. The very first of the crates was being loaded into the hold of a freighter when the cable snapped, sending the entire load plummeting into the Hudson River below. The engine and all the cockpit controls were damaged beyond repair – and just like that, the AVG was down to 99 planes. If Chennault considered the accident a bad omen, he shrugged it off and kept that sentiment to himself. The remaining planes were all shipped to Burma, where they were assembled at the CAMCO factory outside the port city and capital of Rangoon. Test flights took place at a nearby airfield, and the P-40s were then delivered to the AVG.

Chennault organised his planes and pilots into three squadrons of equal size. The 1st Squadron, with fuselage numbers 1-33, was nicknamed the Adam and Eves. The 2nd Squadron, fuselage numbers 34-66, was dubbed the Panda Bears, while the 3rd Squadron, fuselage numbers 67-99, was called the Hell's Angels. For a time, the AVG pilots and their ground crew shared the Kyedaw airfield near Tounghoo, Burma, with units of the RAF.

"THE VERY FIRST OF THE CRATES WAS BEING LOADED INTO THE HOLD OF A FREIGHTER WHEN THE CABLE SNAPPED, SENDING THE ENTIRE LOAD PLUMETTING INTO THE HUDSON RIVER BELOW. THE ENGINE AND ALL THE COCKPIT CONTROLS WERE DAMAGED BEYOND REPAIR"

CURTISS P-40

The warbirds of the AVG may be remembered for their iconic nose art, but it took more than graphic design to win the air war for Chinese freedom.

MOUTH & EYE

The distinctive shark's mouth and menacing eye became world famous as emblems of the Flying Tigers. The pilots painted the nose cowls of their P-40s to strike fear in the hearts of enemy airmen.

ENGINE

The Allison V-1710 12-cylinder liquid-cooled engine produced 1,350 horsepower and a maximum speed of 378 miles per hour. The V-1710 was the only engine of its kind produced in the United States during World War II.

VISIBILITY

Visibility was adequate although restricted by the complex windscreen frame. Ground visibility was especially poor, which contributed to accidents along with the narrow landing gear.

FIRE EXTINGUISHER

A fire extinguisher was kept under the seat and a first aid kit was attached to the right-hand side of the cockpit. Both could mean the difference between life and death.

LANDING GEAR

The narrow landing gear track made the P-40 prone to accidents on the ground. Numerous fighters were lost in training accidents with novice Chinese and American pilots at the controls.

COCKPIT

The armoured cockpit absorbed punishment and contributed to pilot survivability. In contrast, Japanese aircraft were lightly armoured and quite susceptible to explosions in midair.

ARMAMENT

.50-calibre Browning M2 machine guns provided heavy firepower. Some variants of the P-40 also mounted .30-calibre machine guns; however, the heavier Browning M2 was more effective against enemy targets.

AIRFRAME

The steel airframe made the aircraft heavy and rugged. Such construction made the P-40 capable of absorbing tremendous amounts of enemy fire and bringing its pilot home safely. Ground crewmen patched damaged aircraft and got them back into the air as rapidly as possible.

Some of the AVG pilots heard that RAF personnel of No 112 Squadron, flying P-40s based in North Africa, had painted the mouths of fearsome tiger sharks on their engine cowlings, probably copying the design from a unit of the German Luftwaffe they had encountered over the Mediterranean Sea. The artists among the Americans went to work replicating the razor-toothed jaws, and soon the Chinese began referring to the mercenary pilots as 'Flying Tigers'. The nickname stuck, and a cartoonist from Walt Disney Studios complemented the gaping sharks' mouths with the image of a stylish Bengal tiger wearing wings and leaping through a 'V' for victory emblazoned on the fuselages of many P-40s.

Although they flew as a combat unit for only seven months, from December 1941 to July 1942, the Flying Tigers gained lasting fame in the skies of the CBI during World War II. Training mishaps, mechanical failures – particularly with the P-40's Allison engine – and combat damage continually reduced the number of operational aircraft, and Chennault never had more than 55 planes and 70 pilots at his disposal. Still, the Flying Tigers compiled a remarkable record, confidently debunking the myth of Japanese aerial invincibility in the process.

During those frenetic days, the AVG claimed 299 enemy planes – destroyed both in the air along with scores on the ground – shot up during dangerous strafing runs. Its top scoring aces accounted for more than 60 Japanese aircraft. They included Robert Neale with 13 victories, Ed Rector with 10.5, David Lee 'Tex' Hill with 10.25, and George Burgard, Robert Little, and Charles Older each with ten.



■ A 'blood chit' given to the Flying Tigers by the Nationalist Chinese government. It would be used as identification so that downed airmen could get aid from any Chinese civilian they came across

In turn, the Flying Tigers lost four pilots in the air to Japanese planes, six who were killed during strafing runs against ground targets, three who perished in training accidents, and three who died during enemy bombing raids. Three AVG pilots were shot down and taken prisoner. A dozen P-40s were lost in aerial combat, while another 61 were destroyed on the ground during enemy air raids, in training accidents, or deliberately when the airfield at Loiwing was hastily evacuated with the fall of Burma in May 1942.

Chennault initially deployed the Flying Tigers in two groups, defending both Rangoon and western China, where the Burma Road, the

tortuous overland lifeline of supplies that stretched 600 miles from Lashio in northern Burma to Kunming, snaked through mountains and valleys.

The first Flying Tiger missions were flown on 8 December 1941, the day after Pearl Harbor. As word of their success became public, the pilots were lionised in the press. Following one notable air battle, a newspaper crowed, "Last week ten Japanese bombers came winging their carefree way up into Yunnan, heading directly for Kunming, the terminus of the Burma Road. 30 miles south of Kunming, the Flying Tigers swooped, let the Japanese have it." The paper continued, "Of the ten bombers, four plummeted to Earth in flames. The rest turned tail and fled. Tiger casualties: none."

Even the Japanese grudgingly acknowledged the toll the Flying Tigers were taking as the aggressive pilots employed Chennault's maxim, "Use your speed and diving power to make a pass, shoot, and break away! Never, never, in a P-40, try to outmanoeuvre and perform acrobatics with a Jap Zero. Such tactics, take it from me, are strictly non-habit forming."

Radio Tokyo issued a stern warning that AVG personnel rather enjoyed. "The American pilots in Chinese planes are unprincipled bandits," the propagandist blared. "Unless they cease their unorthodox tactics they will be treated as guerrillas." The broadcast was a veiled threat that if a Flying Tiger pilot was captured, he might well be executed.

Adding to the Flying Tiger mystique was the cavalier attitude of the pilots and their disdain for military protocol. Little attention was paid to rank or station, and there was simply no such thing as a regulation uniform. Footwear included

CHRISTMAS COMBAT

Perhaps the most dramatic engagement of the Flying Tigers' brief combat history took place on Christmas Day, 1941

On 25 December 1941, the Japanese launched their second heavy air raid against Rangoon, the Burmese capital, in 48 hours. At Mingaladon airfield, north of the city, Christmas Day was a muggy 46 degrees Celsius, smothering the pilots of the Flying Tigers' 3rd Squadron, the Hell's Angels. Suddenly, the air raid siren wailed. 13 Hell's Angels pilots sprinted to their Curtiss P-40 Tomahawk fighters, joined by 16 pilots of No 67 Squadron RAF flying the Brewster Buffalo.

Just past noon, the characteristic V-formations of 71 enemy bombers and at least 30 fighters appeared. Charles Older, who had felled two enemy bombers on 23 December,

fire at 200 yards and tearing an enemy plane apart with his six .50-calibre machine guns. Executing a flawless 'boom and zoom', he broke away in a power dive and made another pass. This time, a second bomber fell to his guns.

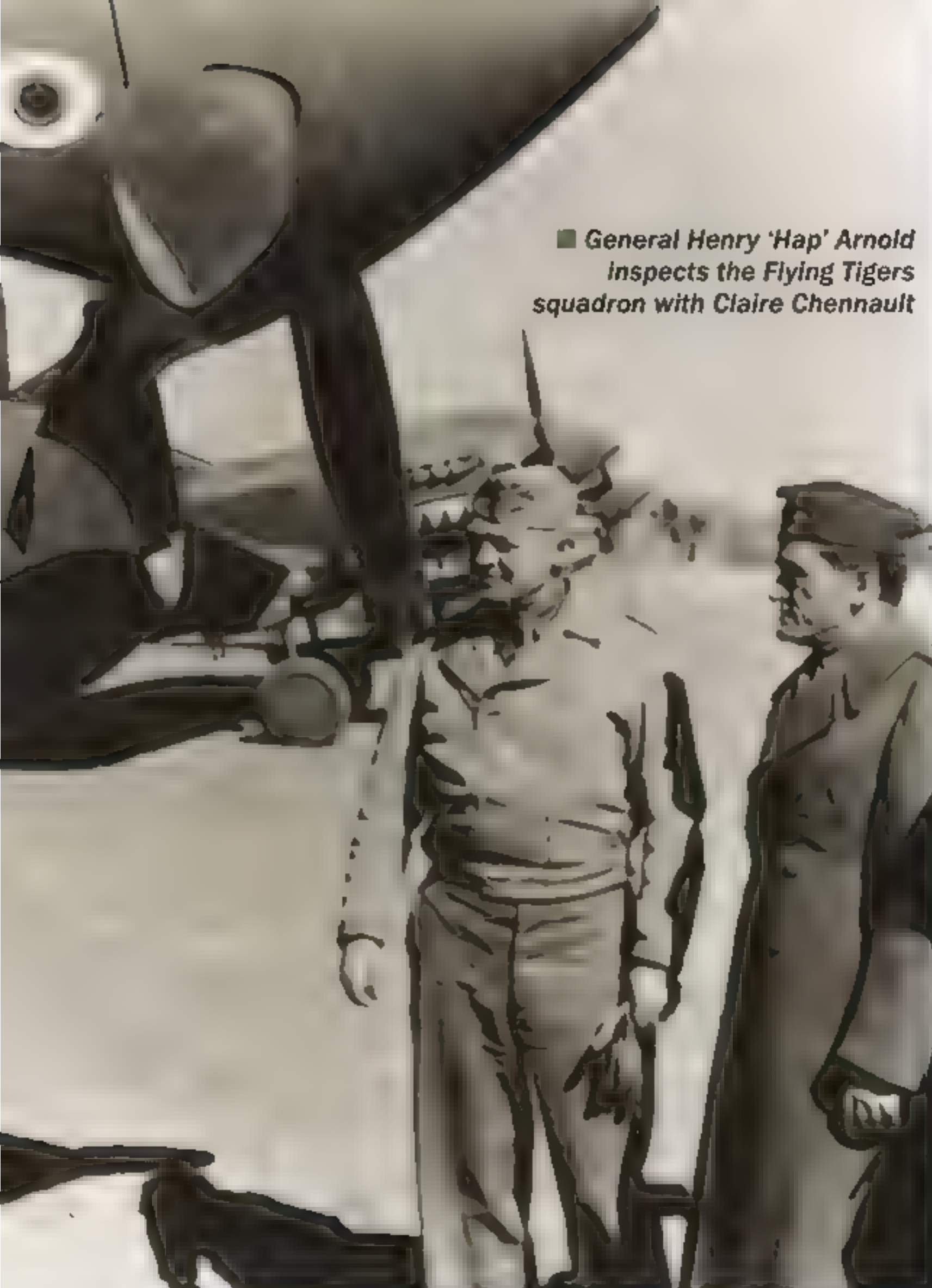
When the Japanese turned toward home, Older pounced on an escorting Nakajima Ki-43 'Oscar' fighter and sent it spiralling earthward for his fifth kill. He had become an ace.

Flying Tiger Robert P 'Duke' Hedman was credited with four Japanese bombers and a fighter, attaining the coveted status of ace in a single day. George McMillan shot down three

enemy planes, while Tommy Haywood and Ed Overend each claimed a pair to their tally.

As Robert 'RT' Smith pulled away from his second kill against the bombers, he confronted an Oscar slicing toward him head-on, guns blazing. Smith held steady. His P-40 shuddered as bullets from its guns raked the enemy. In a flash, the Japanese plane passed below, billowing smoke before rolling over and plunging into the Gulf of Martaban. The Flying Tigers and their RAF allies claimed 32 aerial victories in the swirling Christmas Day battle, while only two P-40s were shot down along with four Buffaloes.

■ The Japanese expected the Ki-43 Oscar to perform well against Curtiss P-40s



■ General Henry 'Hap' Arnold
inspects the Flying Tigers
squadron with Claire Chennault



■ Maintenance on a
Curtiss P-40 at Kunming,
China, circa 1941

cowboy boots with thick heels. The pilots also engaged in aerial antics, performing aerobatic feats and slow, low victory rolls to celebrate kills when they returned from combat missions.

Alcohol flowed freely, and one story relates that a group of Flying Tigers persuaded the pilot of a C-47 transport plane to conduct a nocturnal 'air raid' on Hanoi. The Americans scrounged for any explosives they could find, including old ordnance of French and even Russian manufacture. Fortified with liquid courage, they packed the C-47's cargo hold with bombs. When they arrived above their target, they reportedly opened the side door, kicking and rolling the explosives into the night.

Before Chennault withdrew all AVG fighters from Burma in the spring of 1942, the Flying Tigers engaged in several large-scale aerial battles with the Japanese, and their RAF allies joined in as well. On 23 December 1941, a flight of 12 Hell's Angels P-40s along with Brewster Buffalo fighters of No 67 Squadron RAF engaged a formation of Japanese Ki-21 bombers headed for Rangoon. The Allied planes shot down five bombers and four escorting fighters, but a pair of P-40s was lost. Despite the better kill results, Chennault considered the mission a setback since he had few planes or pilots to spare.

On 25 February 1942, a force of 166 Japanese fighters and bombers attacked Rangoon. Nine Flying Tiger pilots gunned the engines of their P-40s and descended on the enemy like avenging angels. 24 Japanese aircraft were shot down in flames, while three P-40s were lost. A day later, 200 more Japanese aircraft appeared above the city, and six Flying Tiger P-40s mounted a spirited defence, roaring through the enemy formations to claim 18 planes destroyed.

19 Flying Tiger pilots were officially credited with five or more confirmed aerial victories during their combat tours with the AVG, achieving ace status. Tex Hill served as a flight leader and squadron commander with the

Panda Bears and, in addition to his 10.25 kills with the AVG, finished the war with 15.25. He scored his first aerial victories on 3 January 1942, during a strafing mission against the Japanese airfield at Tak, Thailand, and vividly recalled the encounter.

"I was really excited as we neared the target area. It was then that I noticed there were too many of us in formation," Hill remembered. "Somehow a Japanese Zero swooped in and got on the tail of the P-40 in front of me. I pulled the trigger, fired my machine guns, and shot the Zero down. Unknown to me there was another Zero up there with us, but I didn't see him in time. He put 33 bullet holes in my P-40 fuselage before I could break away.

"Later, during that same mission, another Jap came in straight at me – head on!" Hill continued. "I held the machine-gun trigger down. We got closer and closer. I thought we were going to collide, but he just blew up in front of me. I never touched a piece of his wreckage either."

Although Hill identified his victims as Zeroes, other accounts refer to them as a pair of Ki-27s. Chennault also had described enemy fighters as Zeroes, and debate continues as to whether the Flying Tigers actually fought the fabled Japanese plane during their seven months of aerial combat. Some sources support the claim that the P-40 pilots did battle Zeroes, while others assert that the Imperial Japanese Navy had withdrawn its assets from the Asian mainland prior to the AVG's entry into combat. In either case, the majority of enemy fighters that the American pilots duelled in the air above China and Burma were Ki-27s, nicknamed 'Nate' by the Allies, and the Ki-43 'Oscar', a Japanese Army fighter that bore a close resemblance to the Zero – accounting for some confusion.

Through it all, the Flying Tigers' ground crews performed minor miracles, managing to keep enough P-40s in the air to continually battle the Japanese. Damaged planes were cannibalised for spare parts. Supplies were scarce, and

those that did arrive had travelled an immense distance across ocean, by rail, and in the air. Despite having no bomb racks fitted to their planes, the Flying Tigers even improvised some explosives, rigging pipe bombs to parachutes originally intended for flares and filling empty scotch and whiskey bottles with gasoline as makeshift incendiaries.

During an interview with a war correspondent, one Flying Tiger pilot asked the reporter to "save some big words for our ground crews. They have gone through strafings, dodged bombs, and have always been out there working on our planes at all hours".

On 4 July 1942, the American Volunteer Group was officially disbanded. Reconstituted as the China Air Task Force of the US Army Air Forces, the squadrons later joined the 23rd Fighter Group of the 14th Air Force, which subsequently adopted the nickname of the Flying Tigers. Five veteran AVG pilots, including Tex Hill, remained with the 23rd Fighter Group to train new pilots.

Meanwhile, in April 1942, Claire Chennault returned to the Army Air Forces with the rank of colonel, commanding the China Air Task Force. His weathered face made the cover of the 10 August 1942, issue of *Life* magazine. Even though the Flying Tigers had ceased to exist as an independent fighting force a month earlier, their exploits remained popular with the media.

In March 1943, Chennault was promoted to the rank of major general and given command of the 14th Air Force, a post that he held until August 1945. He retired that October and died in Washington, DC, at the age of 67 over ten years later on 27 July 1958.

The legacy of the Flying Tigers is one of grit, determination and bravery against overwhelming odds. Surely this handful of American pilots should continue to capture the imagination today not solely because they dared to take on the Japanese – but also because they consistently bested their enemy in the air.

TIGER ROLL CALL

A number of Flying Tiger pilots achieved success during and after their days with the famous fighter group



BRIGADIER GENERAL DAVID LEE 'TEX' HILL

Tex Hill served as both a flight and squadron commander with the Panda Bears and remained in China to train pilots and lead the 23rd Fighter Group of the US Army Air Forces, ending the war with 15.25 aerial victories. After World War II, Hill engaged in mining, ranching and oil speculation. He remained in the Army Reserve and in 1946 became the commander of the newly formed Texas Air National Guard. Promoted to brigadier general

at the age of 35, he was the youngest general officer in the history of the Air National Guard. Hill retired from duty in 1968 and became a frequent guest at all shows and events commemorating the Flying Tigers around the world. In 2002, he received the Distinguished Service Cross for valour, 60 years after the engagement for which he was being recognised. Hill died at his home in Texas in 2007. He was 92 years old.



COLONEL ED RECTOR

Ed Rector was serving as a naval aviator, flying from the aircraft carrier USS Ranger, when he resigned his commission to join the American Volunteer Group. Rector scored the Flying Tigers' first aerial victory against the Japanese in combat above the Chinese city of Kunming on 20 December 1941. He was the second-highest scoring ace of the AVG with 10.5 kills and went on to command the 76th Fighter Squadron of the 23rd Fighter Group, shooting down two enemy fighters on 25 September 1942. As commander of the 23rd Fighter Group, he recorded

his last kill, and reportedly the last for the unit, on 2 April 1945. Rector remained in China after the war, serving as a military advisor. He retired from the US Air Force in 1962 and worked as an aviation consultant in numerous countries. He died on 26 April 2001 at the age of 84.

"RECTOR SCORED THE FLYING TIGERS' FIRST AERIAL VICTORY AGAINST THE JAPANESE IN COMBAT ABOVE THE CHINESE CITY OF KUNMING ON 20 DECEMBER 1941"



COLONEL GREGORY 'PAPPY' BOYINGTON

The best known of the Flying Tigers, Colonel Gregory Boyington, served as a flight leader with the AVG and was credited with two Japanese planes. Originally a Marine pilot, Boyington rejoined the Corps in September 1942 and became famous commanding Fighter Squadron 214 (VMF-214), the 'Black Sheep', in the Solomons. At 31, Boyington was older than the other pilots. They called him 'Pappy'.

Boyington became the top Marine ace of World War II with 28 victories. He received the Medal of Honor for an engagement in which 24 Corsairs shot down 20 enemy fighters with no losses. On 3 January 1944, Boyington had just flamed his 28th enemy plane when he was shot down. He spent 20 months in a prison camp. Boyington retired from the Marines in 1947 and worked at various jobs. The television series *Baa Baa Black Sheep* more fiction than fact, brought notoriety. He died at the age of 79 on 11 January 1988.



LIEUTENANT COLONEL CHARLES OLDER

A leading AVG ace, Charles Older entered flight training with the US Marine Corps after graduating from college in 1939. He resigned to join the AVG in the summer of 1941 and participated in aerial engagements above Rangoon, Burma, in December.

Flying with the 3rd Squadron, Hell's Angels, Older completed his AVG tour with ten victories. Returning to the US in the summer of 1942, he joined the US Army Air Forces. He later served in China as

operations officer and deputy commander of the 23rd Fighter Group. At the end of World War II, he had tallied 18 kills.

After the war ended, Older graduated with a law degree from the University of Southern California. In 1967, Governor Ronald Reagan appointed him to Superior Court in Los Angeles. Judge Older presided over the trial of notorious murderer Charles Manson. He died at his home in Los Angeles on 17 June 2006 at the age of 88.

"FLYING WITH THE 3RD SQUADRON, HELL'S ANGELS, OLDER COMPLETED HIS AVG TOUR WITH TEN VICTORIES"



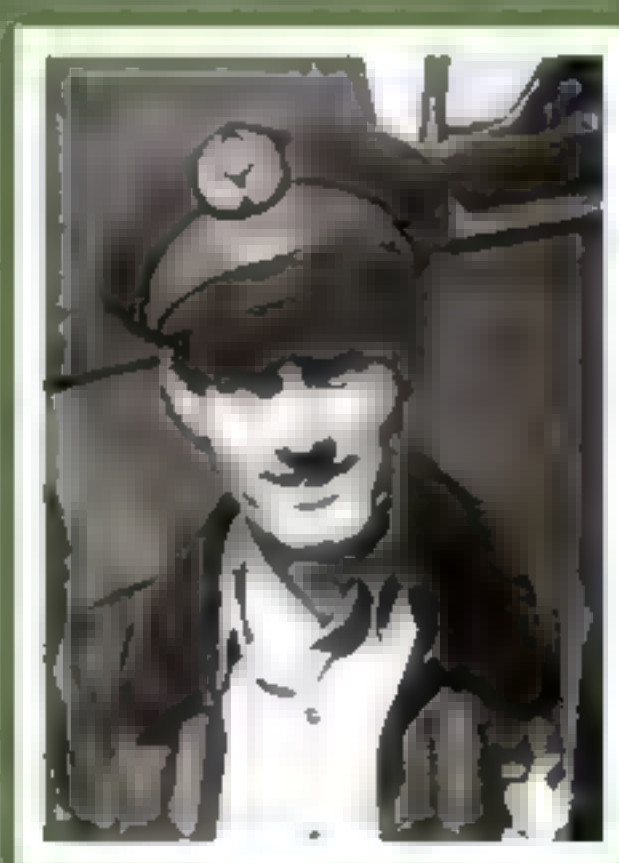
MAJOR GENERAL CHARLES BOND

A US Army Air Forces pilot, Charles Bond, resigned his commission, arriving in Burma on 12 November 1941, to join the Flying Tigers. He was credited with seven aerial victories and was shot down twice. Some historians credit Bond as the first Flying Tiger to paint the famous shark mouth on his P-40 fighter.

In October 1942, Bond rejoined the Army Air Forces, serving as the pilot for W Averell Harriman, US Ambassador to the Soviet Union. After World

War II, he worked as a commercial pilot before returning to the military. In the 1950s, he commanded the 25th and 28th Air Divisions. During the Vietnam War, he led the 2nd Air Division and the 12th and 13th Air Forces.

Bond retired in 1968. In 1984, his book *A Flying Tiger's Diary* became a bestseller. Bond served as a consultant for Texas Instruments and died on 18 August 2009, at the age of 94.



LIEUTENANT COLONEL ROBERT T SMITH

Robert T Smith was an early Flying Tiger commitment, resigning from the US Army Air Forces in July 1941. He flew his first combat mission on 23 December, shooting down a Japanese bomber while sharing credit for another. On Christmas Day 1941, Smith shot down three enemy planes. He became flight leader in the AVG's 3rd Squadron, the Hell's Angels. When the AVG was disbanded, he had tallied 8.9 aerial victories.

Soon Smith returned to the Army Air Forces. He commanded the 337th Fighter Squadron, the 329th Fighter Group, and the 1st Air Commando Group, leading medium bombers and flying fighter escort missions.

After retiring from the military, Smith flew as a commercial pilot, wrote radio scripts and worked for the Flying Tiger Line, the first air cargo company from the US. He published a book, *Tale of the Tiger*, based on his diaries. Smith died on 21 August 1995, at the age of 77.

"19 FLYING TIGER PILOTS WERE OFFICIALLY CREDITED WITH FIVE OR MORE CONFIRMED AERIAL VICTORIES DURING THEIR COMBAT TOURS WITH THE AVG, ACHIEVING ACE STATUS"



▲ A Flying Tiger veteran photographed in front of an image of his comrades, at Kunming Museum, China



GROCERY

WANT

FRUITS
AND
VEGETABLES

I AM AN AMERICAN

The day after Pearl Harbor,
a Japanese-American store
owner in Oakland, California,
put this sign on his shop. It did
not do him much good.

WANTO CO

WANTO CO

INNOCENT SUSPECTS

THE RIGHTS OF JAPANESE-
AMERICANS WERE AMONG THE
CASUALTIES OF PEARL HARBOR

WORDS BY EDOARDO ALBERT



There was a name for them. Under a law passed in 1798, immigrants from Japan, Germany and Italy became 'alien enemies' following the United States' declaration of war against those countries. The Alien Enemies Act gives the president the power to deport or imprison the citizens of countries with which the United States finds itself at war. The question that faced President Roosevelt in the early months of 1942 was how far he should exercise this power.

It was a question that had arisen 25 years earlier, when the United States entered World War I. In the 19th and early 20th centuries there had been over 1,000 German-language newspapers in America, but, faced with a stark question of loyalty in the wake of America's entry into World War I, the vast majority of German-Americans opted for America. Following the end of World War I, there was continued immigration from Germany to America so that, by the start of World War II, there were 1.2 million German-born Americans, and no less than 5 million had both parents born in Germany. Following its rise to power in the 1930s, the Nazi Party tried to recruit German-Americans to its cause, with a notable lack of success.

As for Italian-Americans, they were probably the single largest ethnic group in the United States, although the vast majority could not be classified as 'alien enemies' under the terms of the Alien Enemies Act through either being born in America or becoming US citizens.

In comparison, there were far fewer Japanese-Americans living in the United States at the outbreak of war. Outside Hawaii, there were only 127,000 Japanese-Americans. Of these, 80,000 were Nisei – American-born of Japanese descent who were therefore American citizens. The rest were Issei – born in Japan before moving to America.

So, what to do about these 'alien enemies' once the United States found itself at war against Germany, Italy and Japan? The sheer numbers of German-Americans made it impractical to do anything other than screen the population for known Nazi sympathisers and agents. Through the course of the war, 11,507 German-Americans were detained. As for Italian-Americans, only 1,881 were imprisoned during the conflict.

It was very different for Japanese-Americans. A smaller, more recently arrived and therefore less established immigrant group, they also had to contend with a long history of anti-Asian prejudice in America that had previously been mainly directed against Chinese immigrants. What's more, the Japanese had started the war, attacking Pearl Harbor in what quickly came to be thought of as an underhanded and treacherous manner. Although the initial reaction was to support Japanese-Americans as good and loyal citizens, within two months of the attack public nerves started to fray. With the perfidy of the Japanese being constantly emphasised in newspapers and reports, and elements of the military, particularly John DeWitt, who commanded the American army protecting the Pacific Coast, raising somewhat paranoid concerns about Japanese fifth columnists, it was only a matter of time before the possibility of detaining Japanese 'enemy aliens' was raised.

So far as General DeWitt was concerned, there was only one appropriate course of action. "A Jap's a Jap," he told newspapers, and the general went on to testify to that effect to Congress. In response, in early February 1942 President Roosevelt authorised the creation of 12 restricted zones on the Pacific Coast. Japanese-Americans living in these zones were made subject to a night-time curfew. On 19 February, Roosevelt expanded military authority so that the army could bar suspected persons from these areas. While

"JAPANESE-AMERICANS, A SMALLER, MORE RECENTLY ARRIVED AND THEREFORE LESS ESTABLISHED IMMIGRANT GROUP, HAD TO CONTEND WITH A LONG HISTORY OF ANTI-ASIAN PREJUDICE"

Japanese-Americans were not specifically named as the target for this action, it was clear that they were the people under suspicion. Finally, on 18 March 1942, the War Relocation Authority was established and told, according to Roosevelt's executive order, to "take all people of Japanese descent into custody, surround them with troops, prevent them from buying land, and return them to their former homes at the close of the war".

It did not take the War Relocation Authority long to act on its orders. On 31 March, just 13 days later, all Japanese-Americans living along the Pacific Coast were ordered to report to stations for onward relocation. They had to sell their homes and their businesses – all of their hard-earned assets. Not surprisingly,

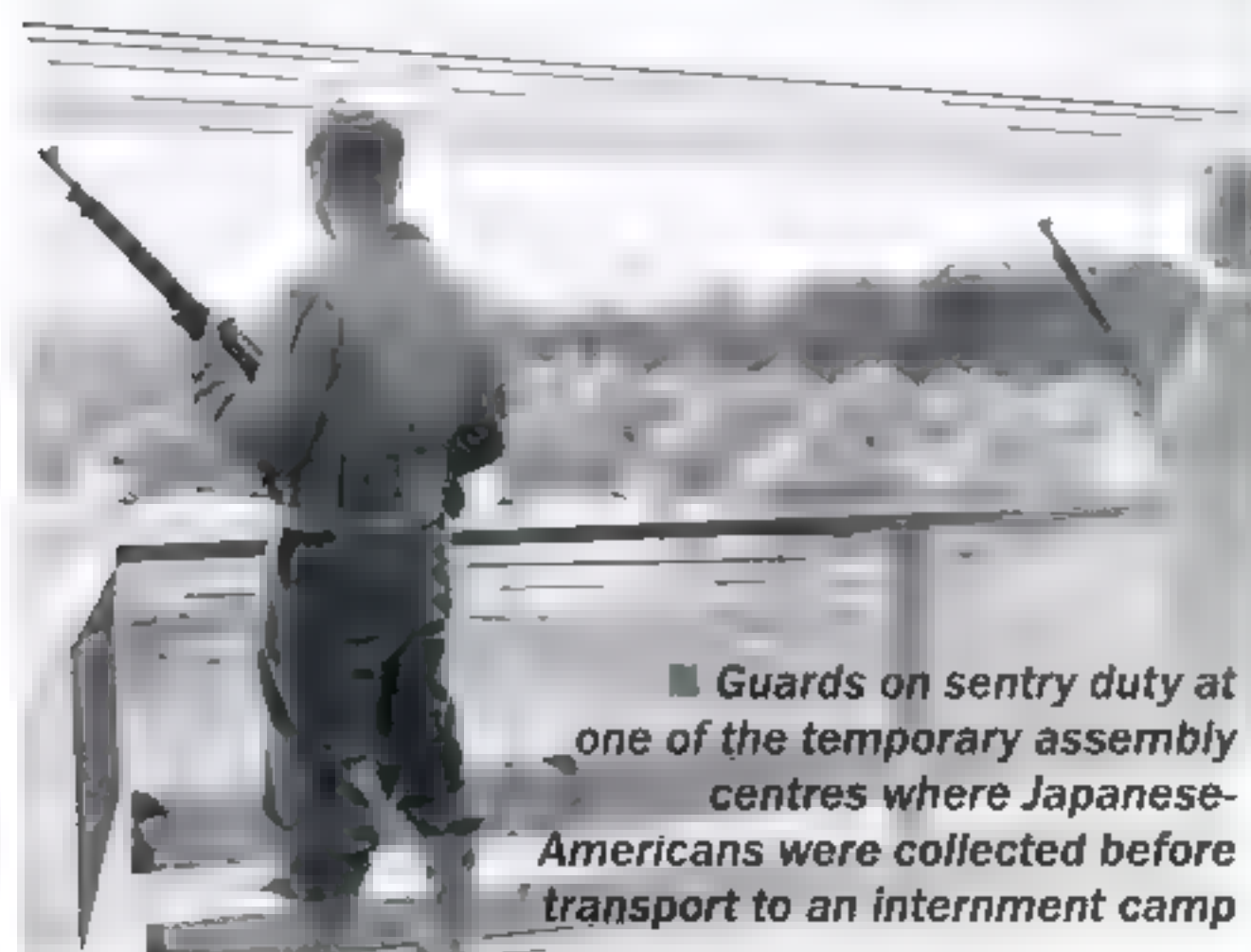
unscrupulous people took advantage of the enforced fire sale, scooping up land and homes and cars at rock-bottom prices. And even though the Nisei were, by definition, American citizens, they too were included in the round-up.

Having left their homes, Japanese-American families were held in temporary assembly camps while the War Relocation Authority rushed to build ten internment camps, mainly in the western states of America, although two camps (later amalgamated into one) were set up in Arkansas.

The conditions in these internment camps were spartan. The camps were surrounded by barbed wire and the prisoners – for prisoners they were – were guarded. Although barren, the camps were at least run humanely. Even so, for



Internees kept their camps immaculate



Guards on sentry duty at one of the temporary assembly centres where Japanese-Americans were collected before transport to an internment camp



Personal belongings are sorted at Heart Mountain Relocation Center in Wyoming



■ The 442nd fought through Italy and France, and elements of the regiment were among the forces that liberated Dachau concentration camp

three years, families of Japanese-Americans had to live and bring up their children in what were essentially prison camps. Within the camps, the internees worked hard to make life as normal as possible in their straitened circumstances. They started and ran schools, they established churches and newspapers, and they kept everything sparklingly clean despite the sand and dust that blew constantly through the camps (many had been set up in arid and semi-arid areas).

However, while the Japanese-Americans went without violence into their captivity, this did not mean that they were content with being singled out as un-American. In particular, legal challenges were mounted to the president's executive order that culminated in the Supreme Court hearing the case of Korematsu vs United States. Fred Korematsu was a Nisei, a son of Japanese immigrants born in Oakland, California. When his family reported for relocation, Korematsu refused to go with them, eventually being arrested on 30 May. He was then sentenced to five years' probation and joined his family at the camp in Utah.

Appealing against his conviction, Korematsu's case came before the Supreme Court, which rendered its judgement on 18 December 1944. The court decided 6-3 in favour of the United States Government, holding that Korematsu's conviction was legal. The majority opinion, as voiced by Justice Hugo Black, stated that, "Compulsory exclusion of large groups of citizens from their homes, except under circumstances of direst emergency and peril, is inconsistent with our basic governmental institutions. But when, under conditions of modern warfare, our shores are threatened by hostile forces, the power to protect must be commensurate with the threatened danger."

This assessment could be summed up by saying that rights are all very well and good, but when we are all threatened then it might be necessary for some people to be singled out due to their racial profile.

The dissent against this ruling, in particular Justice Robert Jackson's resistance, was eloquent and has been judged by history to

■ During the Battle for Monte Cassino, one platoon of the 100th battalion had only five survivors from 50 men



GO FOR BROKE

The most decorated unit in American military history was manned by Japanese-Americans

While mainland Japanese-Americans were interned in camps, those in Hawaii, who made up nearly one-third of the population, were not. Unable to serve in the military, Hawaiian Japanese-Americans formed the Varsity Victory Volunteers, committing themselves to the service of the war effort wherever the military might have the most use for them. Their service was rewarded when the War Department announced the formation of an all-Nisei regiment. 10,000 Japanese-Americans volunteered, although only 1,182 of these were from the mainland (since most of the mainlanders were living in internment camps, this is perhaps not surprising).

The 442nd Regimental Combat Team was formed on 1 February 1943, with the majority of its recruits from Hawaii. The islanders and the mainlanders, who nicknamed each other 'Buddhaheads' and 'Katonks' respectively, were soon at loggerheads, disputes erupting into fist fights, such that the whole future of the regiment

was called into question. It was only when the Buddhaheads were taken to visit an internment camp that the disputes ended: the Hawaiians understood the strain the Katonks were under.

The first element of the 442nd deployed into combat was the 100th battalion, which sailed to North Africa, arriving on 2 September 1943. The 100th took part in the invasion of Italy, serving with courage and distinction through the long and bloody fighting up the Italian Peninsula. So many men were wounded in combat that the 100th received the nickname the 'Purple Hearts Battalion' (the Purple Heart being a US army military honour given to those wounded or killed in action). The 100th took heavy casualties in the battle for Monte Cassino. The rest of the 442nd arrived in Italy on 28 May 1944. Throughout the rest of the war the combined regiment of Japanese-Americans became, for its size, the most decorated regiment in American history. Not much doubt whose side these Nisei were on.

be true. He said, "No claim is made that he [Korematsu] is not loyal to this country. There is no suggestion that, apart from the matter involved here, he is not law-abiding and well disposed. Korematsu, however, has been convicted of an act not commonly a crime. It consists merely of being present in the state whereof he is a citizen, near the place where he was born, and where all his life he has lived."

While the case progressed through the courts, the US Government had been investigating its interned citizens, concluding that many were indeed loyal Americans. Some internees, duly certificated as loyal, were permitted to leave the camps. With the war in the Pacific running strongly in America's favour in 1944, the US Government officially announced on 18 December 1944 that it would close all of the camps by the end of the following year.

In the end, it was March 1946 by the time the last of the internment camps closed – although this last one housed high-security inmates who might plausibly have been of some risk to the American war effort (although many held here came to be regarded as suspect as a result of anger at the way they were being treated by their own government).

Once freed, the interned Japanese-Americans had to rebuild their lives, largely from scratch. By the 1970s, the unjustness of the way they had been treated was beginning to be recognised. President Ford revoked the Executive Order that had led to the internment of Japanese-Americans and apologized for the actions of his predecessor. In 1988, Congress passed a bill authorising the payment of \$20,000 compensation to those surviving Japanese-Americans, almost all of whom were loyal American citizens who had been unjustly imprisoned for three years. Yet even better than the money (to those who received it) was the official recognition that they had been treated unfairly by their own government. 43 long years after the camps had closed, they had finally been vindicated.

■ Sport was one way of passing the time in internment, including this sumo match in the camp at Santa Anita, California



■ Despite the straitened circumstances, Japanese-American families strove to maintain family life and educate their children

"ONCE FREED, THE INTERNED JAPANESE-AMERICANS HAD TO REBUILD THEIR LIVES, LARGELY FROM SCRATCH"

■ Heart Mountain Center in Wyoming. All the camps were in bleak and lonely surroundings



OVERNIGHT ALIENS

1942-46

Japanese-American families arrive at Heart Mountain Relocation Center in Park County, Wyoming. In the wake of the attack on Pearl Harbor many Americans immediately became suspicious of the second- and third-generation Japanese-Americans living in the U.S., most of whom were located on the West Coast.

Following a suggestion from Lieutenant General John L. DeWitt, President Roosevelt ordered the internment of Japanese families residing in America. Between 19 February 1942 and 20 March 1946, between 110,000 and 122,000 Japanese-Americans were forcibly relocated and incarcerated in ten concentration camps. As a result, many children spent their first years within the confines of these encampments.

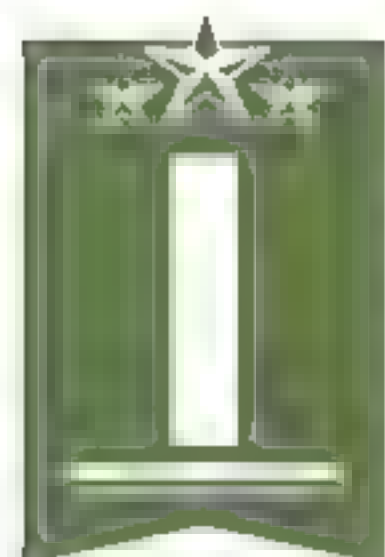




PROJECT Z: TAKING THE BATTLE TO AMERICA

WITH THE WAR GOING BADLY FOR JAPAN, FANCIFUL PLANS WERE HATCHED TO LAUNCH INTERCONTINENTAL BOMBING RAIDS AGAINST THE UNITED STATES

WORDS BY JON WRIGHT



In March 1942, the readership of *Life* magazine was treated to a digest of ways in which the Axis powers might launch an invasion of the United States. It was only a few months since the attack on Pearl Harbor and the Japanese had already made

excellent progress in the Pacific theatre, so American paranoia was running high. In one scenario, *Life* explained, the Germans would storm across the Atlantic while the Japanese fleet would take a northerly route via Alaska and down the Canadian coast before striking at cities including Seattle, San Francisco and Los Angeles. It was predicted that obliging fifth-columnists inside the USA would rally to the Axis cause and carnage would ensue. Other theories suggested that the Japanese might opt for a route via Hawaii and then make a beeline for San Francisco or, yet more daringly, head to Ecuador and Panama from where they

would work their way up the Pacific Coast.

As things turned out, such fears were entirely groundless:

in terms of logistics, finances, troop numbers and overall strategic imperatives, it was highly unlikely that Japan would ever have pursued an all-guns-blazing invasion of the contiguous USA. The best that was ever managed was the occupation of a couple of chilly Aleutian Islands (Kiska and Attu) in Alaska during June 1942. This, to be fair, had potential strategic importance and the 6,000-7,000 Japanese troops held out for over a year, but the adventure failed to come close to being a major turning point in the war.

No: any Japanese attacks on the US mainland would have to come in other shapes and forms. This line of thinking culminated in plans to launch intercontinental bombing raids – the goal of the so-called Project Z – although, ahead of this ambitious (one might even say crackpot) scheme, various other opportunities had presented themselves. They are well worth a quick look since they help to place Project Z in context.

When considering Japan's approach to attacking the United States it is crucial to consider the empire's broader goals and obsessions during the war. The priorities were clear from the outset: to defend the homeland



■ One of the Japanese bomb balloons launched against the USA in 1944



■ A Messerschmitt Schwerer bomber, one of the candidates in the equally ineffective German Amerikabomber project

ONE OF JAPAN'S GREATEST DISADVANTAGES DURING THE WAR WAS ITS ECONOMIC DISPARITY WITH THE USA, SO TARGETED RAIDS ON AMERICA'S WEST COAST INDUSTRIAL INFRASTRUCTURE MADE SENSE



■ Another, more successful Nakajima plane: the Tenzan torpedo bomber

and to sustain (or, preferably, expand) the empire's sphere of influence in East Asia. This is precisely why Pearl Harbor was attacked: it was an attempt to cripple the US military presence in the Pacific. Some hawkish leaders did talk about capturing Hawaii and, to be sure, the islands would have made for an ideal staging post but, as we have seen, madcap dreams of invading America did not rank very highly on most Japanese military agendas.

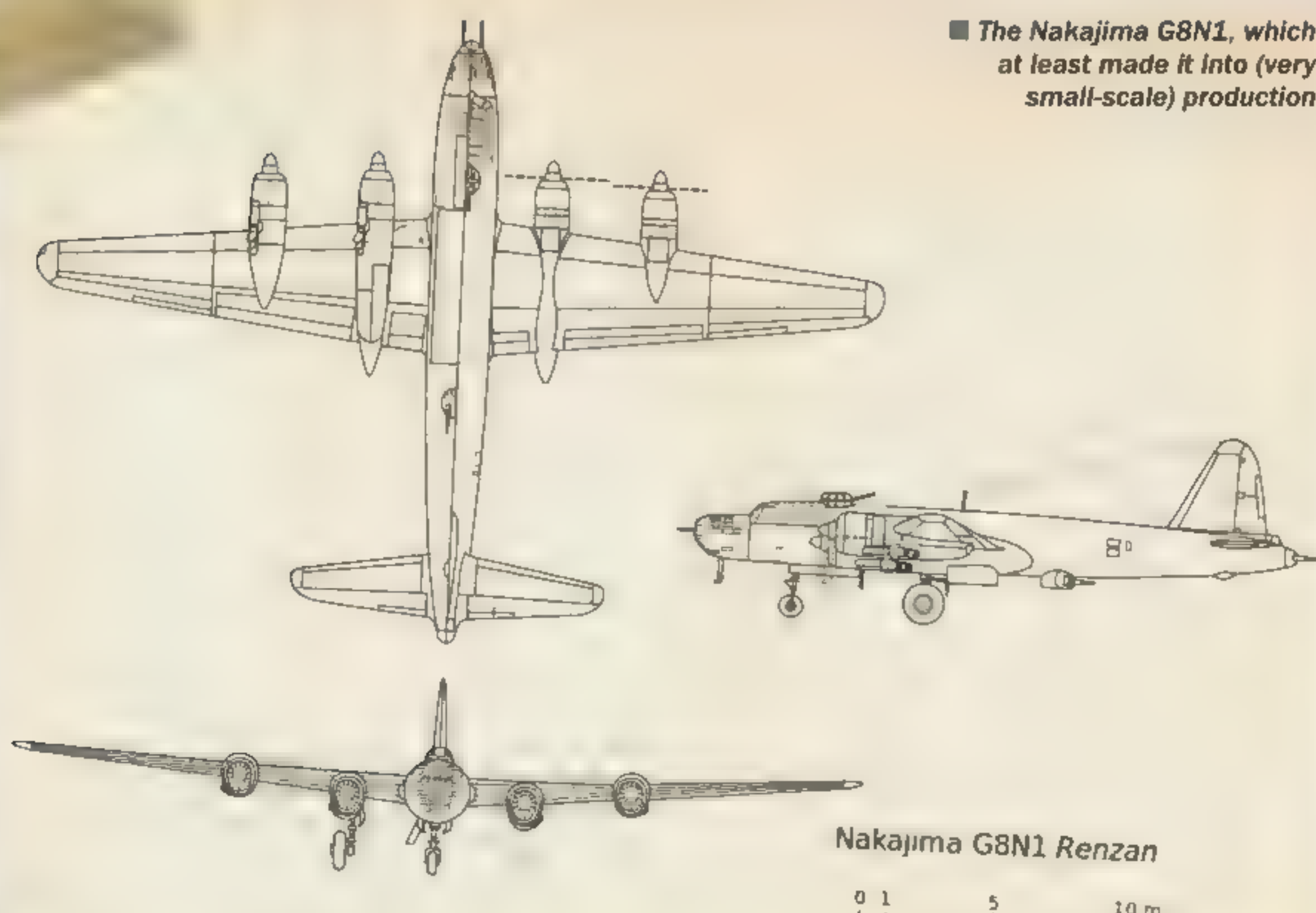
For all that, engaging in a little mischief in American waters was a hard temptation to resist. One of Japan's greatest disadvantages during the war was its economic disparity with the USA, so a few carefully targeted raids on America's west coast industrial infrastructure made good sense. Forcing a slightly rattled United States to invest in (largely unnecessary) defensive measures – such as disguising or fortifying economic facilities – was an added bonus. After Pearl Harbor, for example, a

handful of Japanese submarines remained in waters close to the US. They managed to sink a few ships and, completely out of the blue, they engaged in the bombardment of California's Ellwood Oil Fields, close to Santa Barbara, on 23 February 1942. Much to Japan's annoyance, hardly any damage was inflicted.

A few months later, in June, a Japanese submarine popped up at the head of Oregon's Columbia River and Fort Stevens was fired upon. Again, this proved to be a rather pointless exercise: the fort emerged virtually unscathed. At least, however, the Japanese had managed to create a panic. During the night following the Ellwood attack, reports flooded in of Japanese aircraft flying menacingly over Los Angeles and hours of anti-aircraft fire ensued. As it happened, no Japanese planes were anywhere near the place, and the so-called Battle of Los Angeles proved to be a figment of overactive local imaginations.

More sinister – and sharing some ground with the proposals behind Project Z – was the ingenious idea of sending balloon bombs across the vast Pacific Ocean. At first blush, the strategy seems faintly ludicrous: they were unmanned craft, made of mulberry paper and potato-flour glue, travelling over 8,000 kilometres, and they were utterly dependent on the help of the jet stream and prey to the vagaries of the elements. Nonetheless, a fair few balloons managed to complete the trip during late 1944, though their bombs usually exploded in unpopulated areas and Japanese ambitions of starting major forest fires

■ The Nakajima G8N1, which at least made it into (very small-scale) production



Nakajima G8N1 Renzan

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(which would have been a significant drain on American manpower) were quickly dashed.

By this stage of the war – indeed, from 1943 onwards – it was clear that something dramatic was required. The conflict had been going badly for Japan ever since the disasters at Midway and Guadalcanal, and US forces were edging ever closer to the heart of the empire. What was to be done? One option was to pour resources into the development of mighty Sen Toku submarines, which would be able to travel around the world one and a half times without refuelling, and to carry attack aircraft inside submersible hangers. Or perhaps some of the most formidable bombers ever designed might save the day? Enter, right on cue, Project Z.

In the quest to produce a truly extraordinary bomber (something to put the USA's B-17 or B-29 in the shade), various manufacturers threw their hats into the ring. None was more eager to delight the Japanese navy and army than the Nakajima Aircraft Company, founded back in 1917 as the Japanese Aeroplane Research Institute and renamed in 1931. It had always done good business with the Japanese military but during the war years, under the leadership of Chikuhei Nakajima, it embarked upon its most challenging project.

Chikuhei Nakajima had not been an advocate of entering into conflict with the USA – he believed that economics alone made this a foolhardy enterprise – but, with the empire's back to the wall, he was determined to rise to the occasion. The Nakajima company's contributions came in various forms and existing planes sometimes provided templates for more elaborate designs. The four-engined Nakajima G5N (the 'Shinzan'), for example, had taken to the skies before the outbreak of hostilities with America. It had a decent range of nearly 5,000 kilometres but, even after attempts at redesign, it did not perform brilliantly and further development was cancelled. Four of the G5Ns already built were sidetracked into service as transport planes.

The G8N 'Renzan' also promised a great deal. It was capable, at least on paper, of travelling up to 595 kilometres per hour over 3,700 kilometres with a full payload of 3,990 kilograms of bombs. Four planes had been completed by 1945, and it would have been possible to turn out more quite rapidly, but by

**"IT WAS CLEAR SOMETHING
DRAMATIC WAS REQUIRED"**



■ A monument in Bly, Oregon, commemorating the deaths caused by the unexploded balloon bomb

THE BALLOON BOMB THAT SUCCEEDED

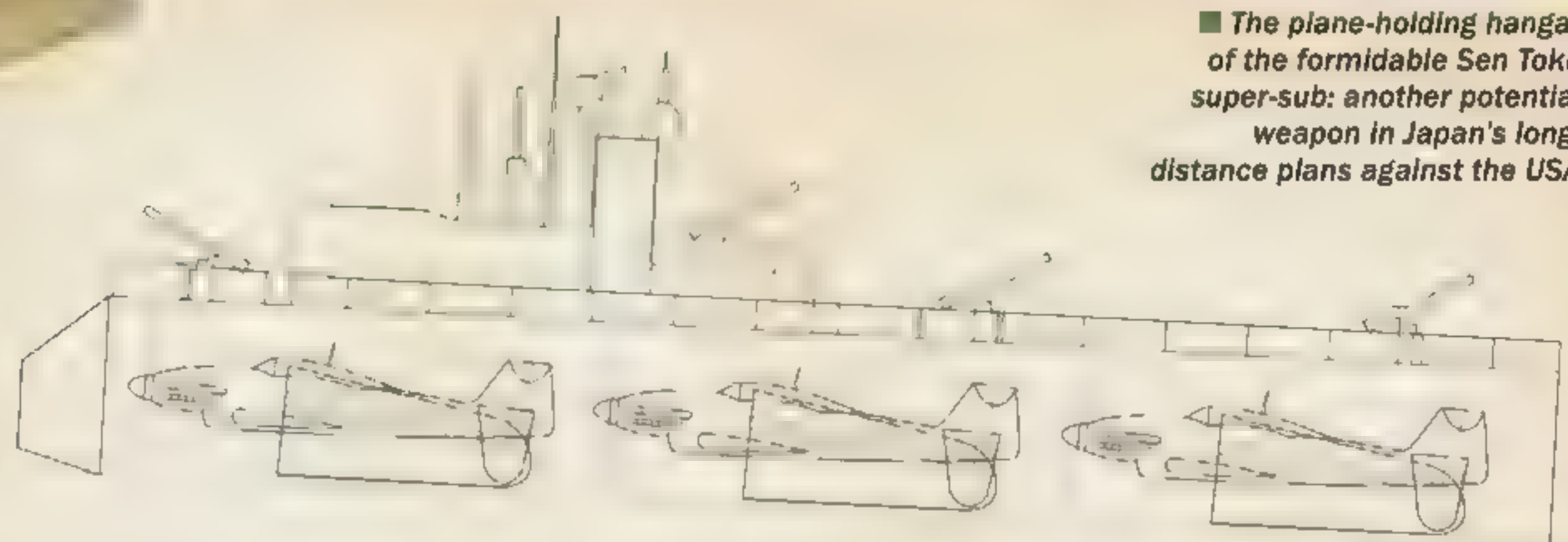
Airborne tragedy struck rural Oregon in May 1945

On 5 May 1945, the Oregon pastor Archie Mitchell took his pregnant wife, Elsie, and a few local children (students from the local Sunday School) on a picnic outing. They came across a curious object, which turned out to be an unexploded Japanese balloon bomb. Despite Archie's calls to keep clear, Elsie and the children investigated, the bomb detonated, and six lives were lost.

The US described the Japanese balloon project as "scattered and aimless"; it was a fair adjudication but this provided little consolation on Gearhart Mountain, outside the town of Bly on that sad spring day.

9,000 balloons were launched with perhaps 1,000 reaching American shores: they were being discovered in coastal waters by early November 1944 and had reached as far as Wyoming by the sixth of the month.

In many ways, the bombs were masterpieces of engineering: it was not easy to produce an unmanned craft that could make the 30-60-hour journey and manage its own descent and explosion through the deployment of timers and ballast devices. Mercifully, Elsie Mitchell and her young neighbours were the only fatalities claimed by the whole enterprise.



■ The plane-holding hangar of the formidable Sen Toku super-sub: another potential weapon in Japan's long-distance plans against the USA

■ A more successful day for a Nakajima aircraft: a fighter involved in the attack on Pearl Harbor

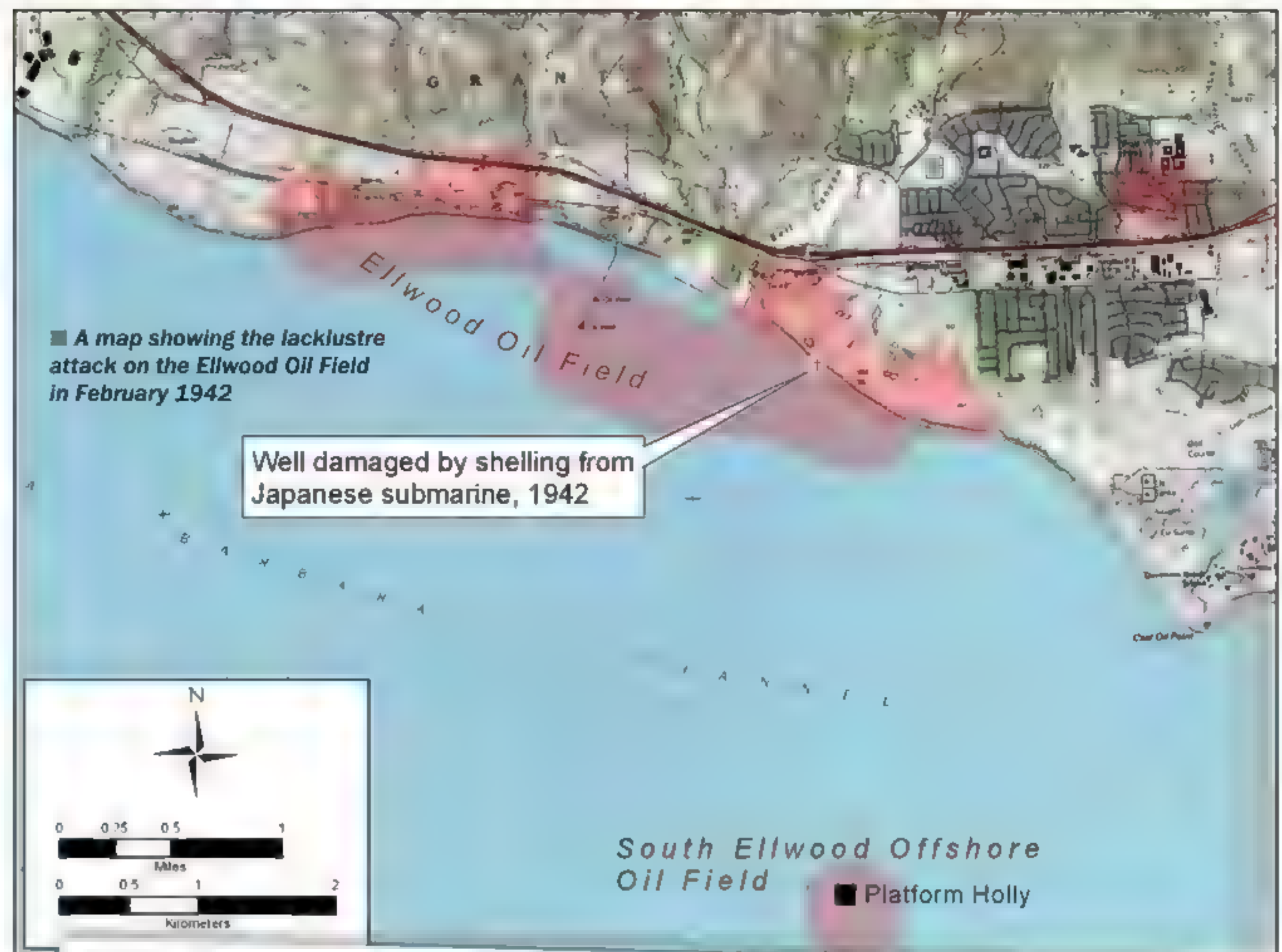
this date the final American assaults on the empire had begun. And, besides, the G8N was still a long way from the holy grail of a truly huge, reliable intercontinental machine.

For this, attention had turned to the Nakajima G10N – the 'Fugaku' – the potential superstar of Project Z. Various designs of this aircraft were undertaken and the claims were certainly impressive. Imagine bombers that could travel over 19,000 kilometres, reaching speeds of 778 kilometres per hour and an altitude of over 12,000 metres. They would be capable of carrying more than 18,000 kilograms of bombs. The planes would launch – so the theory went – from the Kuril Islands, cross the Pacific, then begin to dispense carnage from the skies above America, attacking west coast cities such as San Francisco, Seattle and Los Angeles, then moving onto mid-west targets including Detroit and Chicago. After taking a few potshots at America's east coast, it was on to German-held territory in Europe where the planes could refuel, restock and set off on a return bombing raid.

It was a bold idea but, while work began in January 1943, it quickly became clear that the project was extraordinarily optimistic. The initial plan was to utilise six 5,000-horsepower cylindrical engines, an unheard-of and impractical amount of power under the hood. This was simply asking too much of even the most inventive designer. Even scaled-down versions – equipped with fewer engines with only 2,000-horsepower each – presented insuperable difficulties.

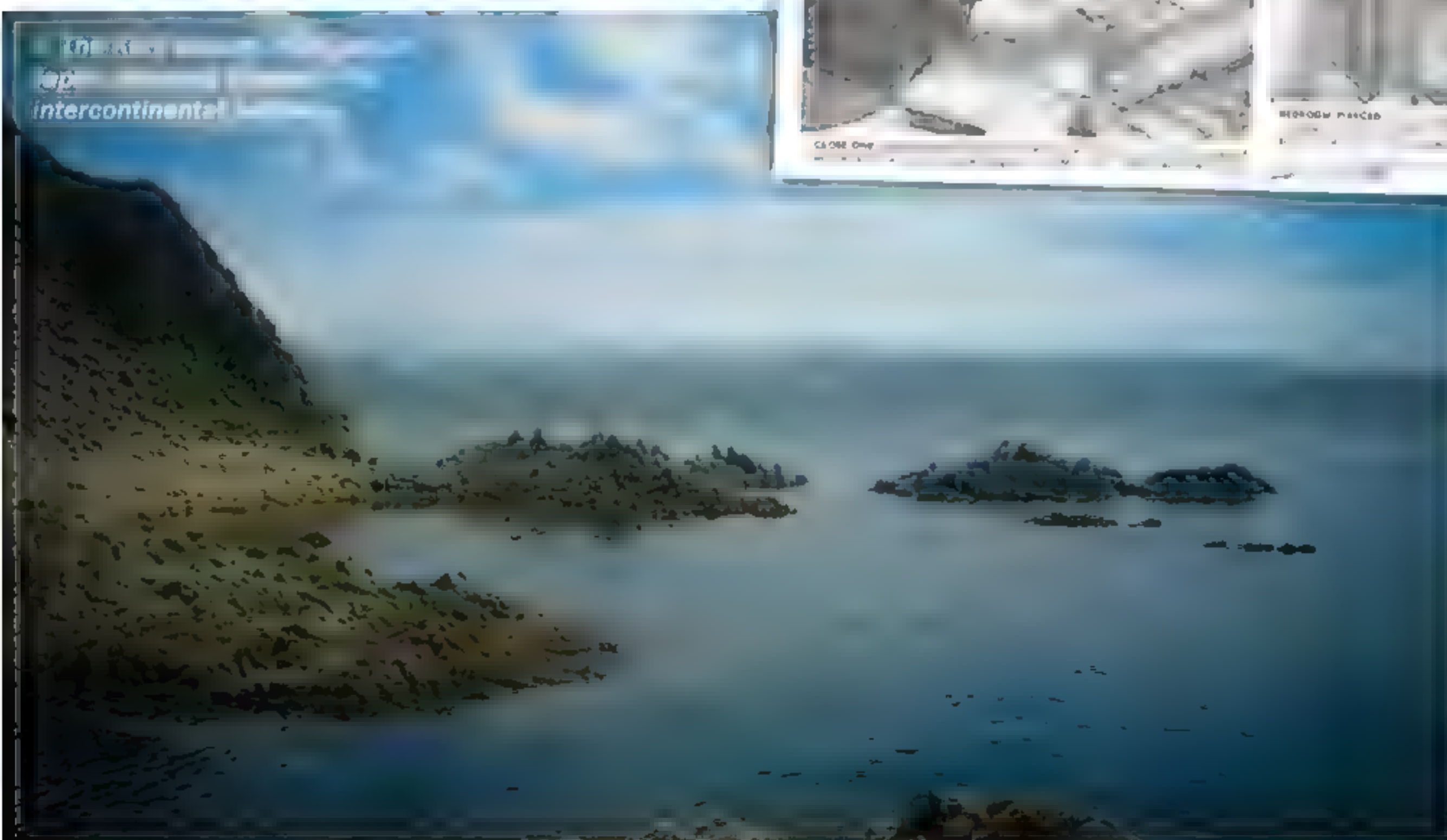
In pursuing Project Z the Japanese patently had their heads in the clouds, though this was an altitude never achieved by the G10N: no aircraft – of any of the various specifications – were ever completed. And, even if the Japanese military had kept faith with the project, more urgent matters had begun to take priority by 1945. The American advance seemed to be unstoppable and, with the fall of Iwo Jima and Okinawa, it was time to focus on the defence of the Japanese nation. In these circumstances, sprightly jet fighters had much more to offer the cause than bulky world-girdling bombers.

Other contenders in the long-range heavy bomber stakes also fell to the wayside during the last months of the war and there was



■ Newspapers report the mythical Battle of Los Angeles in 1942

perhaps something symbolic in a prototype of one of these alternatives – the Kawasaki Ki-91 – being blown to smithereens on the ground by an American air raid in February 1945. From now on, the great Japanese bombers would only survive in the pages of counter-historical fiction (where the A-bombs were never dropped and Japan went on to vanquish its enemies), in the realm of aviation-based computer games (where anything is possible), and on the shelves of toy shops, where the Nakajima bombers are still available to buy, albeit in miniaturised kit form.





■ Admiral William 'Bull' Halsey, one of the US Navy's greatest fighting admirals of World War II



■ General Douglas MacArthur, commander of the South West Pacific Theatre during World War II



■ Admiral Chester Nimitz, commander of the US Pacific Fleet

PACIFIC TYPHOON

THE PACIFIC WAR WAS AN EXTREMELY BLOODY, VICIOUS CAMPAIGN WAGED ACROSS AN ENORMOUS THEATRE OF OPERATIONS ON LAND, IN THE AIR AND ON THE SEA

WORDS BY MARC DeSANTIS



The conflict between the United States and Japan during World War II, often called the Pacific War, was noteworthy for its extreme brutality. The battles of the campaign were often fought under the most appalling of conditions, well away from

centres of supply or other comforts that fighting men could rely upon in other theatres. Simply getting American soldiers and marines to where they needed to be to fight the Japanese enemy required the development of lengthy logistical support networks. Often, little could be sourced locally, and instead the guns, bullets and food of the Americans and their allies had to be brought to the western Pacific by ship from distant ports.

After the surprise Japanese attack on Pearl Harbor on 7 December 1941, the United States became resolutely united in its desire for vengeance against the Empire of Japan. Most of the wrecked battleships damaged in the Pearl Harbor raid would be raised and returned to service. In the meantime, however, the US

Navy found itself fighting a desperate war against a determined Imperial Japanese Navy severely shorthanded.

Matters were scarcely better on land. In the Philippines, the embattled American garrison, debilitated by disease and low on food, held out against impossible odds for months until it was forced to surrender, with the last US soldiers capitulating on Corregidor in May 1942. General Douglas MacArthur, the American commander in the Philippines, was ordered by President Franklin D Roosevelt to evacuate, but he promised to return to liberate the islands.

It seemed highly unlikely that MacArthur would be able to keep his promise. Everywhere, it appeared, the victorious armies and fleets of Imperial Japan were advancing, their momentum unstoppable.

VENGEANCE AND TRIUMPH


American vengeance for Pearl Harbor came first in the form of a daring airstrike against the Japanese Home Islands. On 18 April

1942, Lieutenant Colonel Jimmy Doolittle led 16 B-25 Mitchell bombers, launched from the deck of the aircraft carrier USS Hornet, on an audacious 700-mile, one-way mission against Japan. 12 of those bombers dropped their weapons on Tokyo around noon. Though they caused scant damage and few casualties, the Japanese military establishment was extremely embarrassed that such an attack could even be undertaken by the Americans.

The US and Japanese navies soon tangled at the Battle of the Coral Sea between 4 and 8 May 1942. In numbers of ships and planes destroyed, the tally was close, but in its wider implications, Coral Sea was an American victory because, in saving Port Moresby from enemy attack, it blunted the hitherto unstoppable Japanese drive across the South Pacific. It was also remarkable as being the first naval battle in history in which the combatant fleets never came within visual range of one another, as the engagement was conducted by each side's carrier aircraft.

In upper Japanese military circles, the shame caused by the Doolittle Raid still lingered. To

**"THE US NAVY FOUND ITSELF
FIGHTING A DESPERATE WAR AGAINST
THE JAPANESE NAVY SHORTHANDED"**

 Japanese super battleship
Yamato explodes after being
hit by American torpedoes
and bombs on 7 April 1945

Images: Getty Images (MacArthur), Aamir Yamashita

JAPAN VS AMERICA

prevent a recurrence of a similar airstrike, the Japanese resolved to plug the gap in their defensive perimeter through which the Hornet had slipped to launch her warplanes.

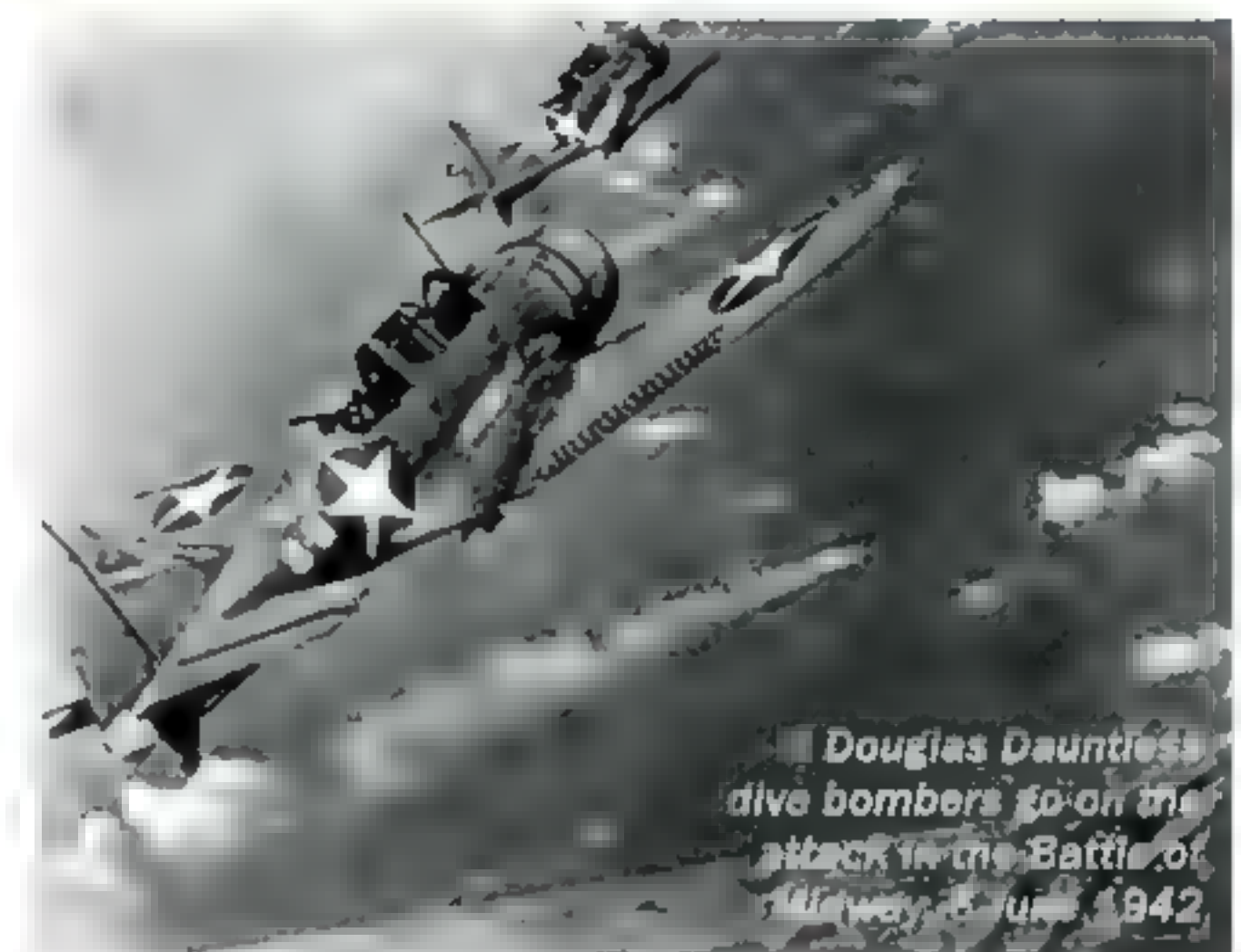
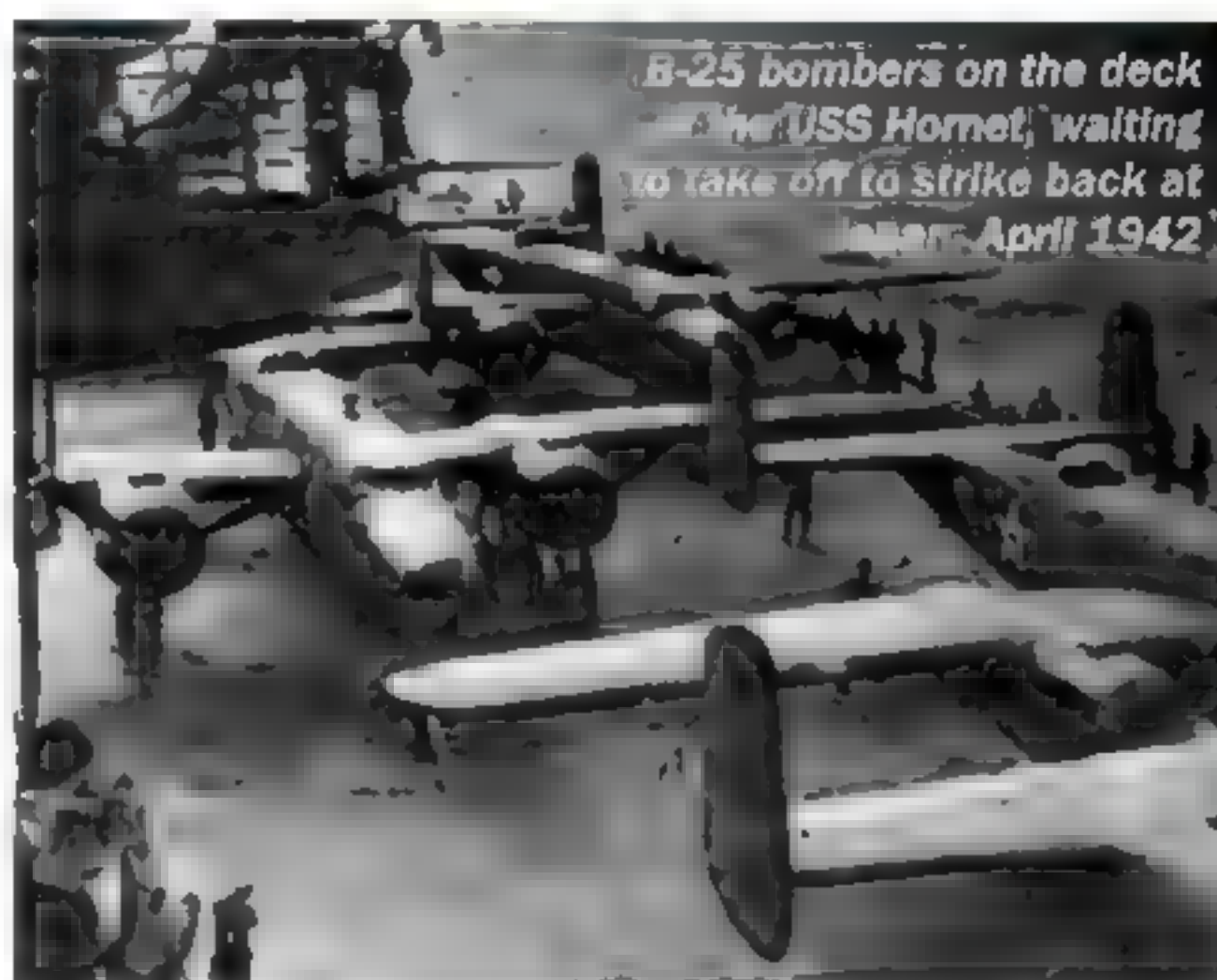
The Japanese had also concluded that the strike on Pearl Harbor had not damaged the US Pacific Fleet as much as had been hoped. Admiral Isoroko Yamamoto, the planner of the raid and chief of the Imperial Japanese Navy, decided that an attack on Midway, an American-held island over 1,000 miles from Pearl Harbor, was now necessary. Yamamoto expected that the American Pacific Fleet would defend Midway, and the Japanese Combined Fleet would then demolish it. Eliminating the Pacific Fleet would pave the way for a subsequent invasion of Hawaii. It might also persuade the Americans to enter into negotiations to end the war, something that the Japanese were eager to see, and would count as a victory, if it occurred.

Luck would favour the Americans in the upcoming battle. American cryptanalysts had broken the Japanese naval code, dubbed JN-25, in early 1942, and knew that Midway was the target of the Japanese operation. Yamamoto had also planned a subsidiary, decoy operation against the Aleutian Islands of the US territory of Alaska, but this failed to distract the Americans.

A mighty Japanese fleet bore down on Midway in early June 1942. In the early morning of 4 June, Japanese carrier fighters struck at the island, inflicting heavy damage there before returning to their carriers. Admiral Chuichi Nagumo, commander of the Japanese battlefleet, was preparing his carrier planes for an attack on US warships with torpedoes, but after hearing from the air raid commander that Midway should be hit again, he decided on a second strike on the island to complete its destruction. He ordered that his planes should be rearmed with fragmentation bombs suitable for attacking land targets.

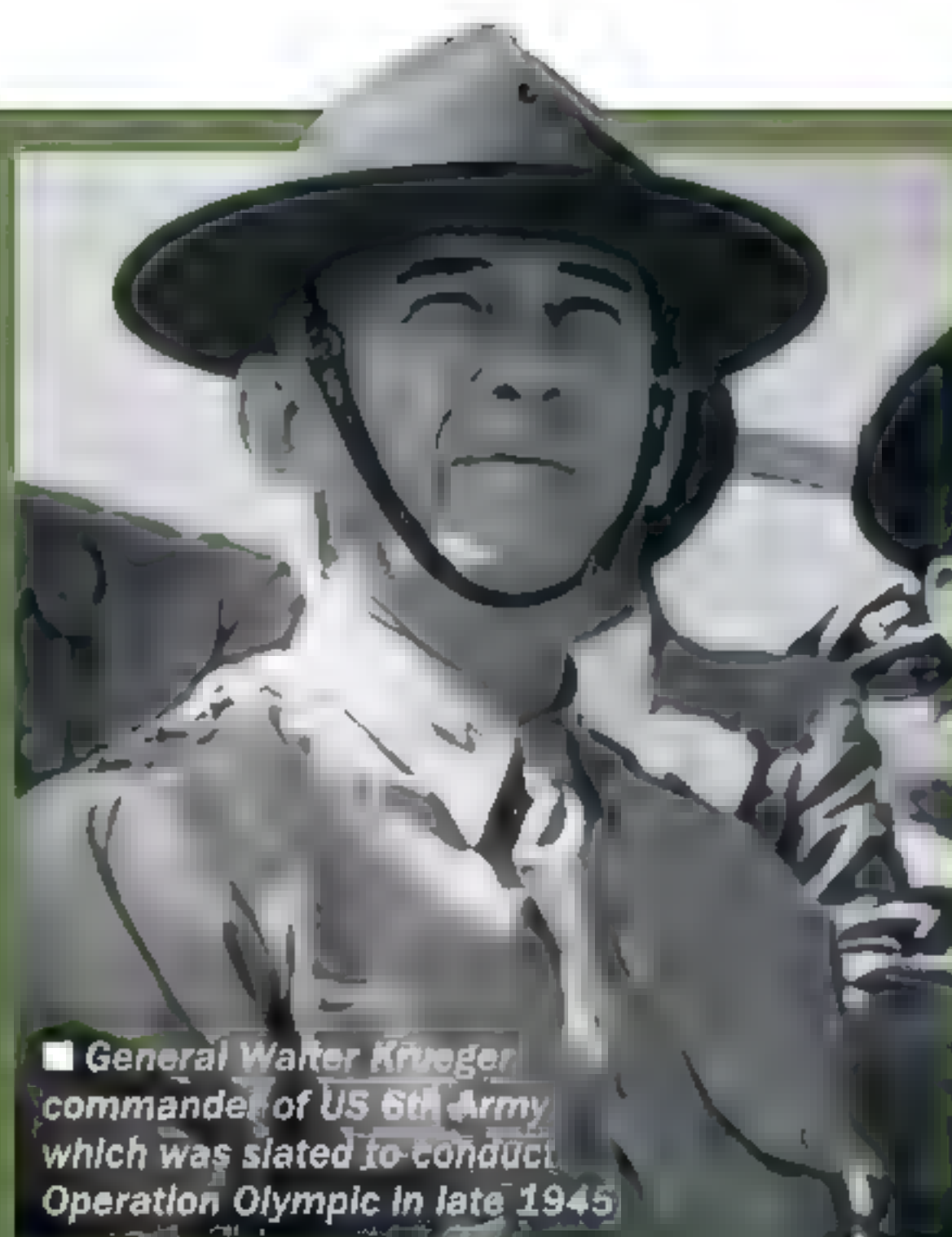
In the midst of this rearming and refuelling, American torpedo bombers and dive bombers arrived overhead. The manoeuvrable Japanese Zero fighters patrolling the skies massacred the low-flying Avenger torpedo bombers, but they were now too low to stop the Dauntless dive bombers far above when they came in to attack not long afterward.

The result was a disaster for the Japanese. American bombs rained down on Japan's carriers, each packed with aircraft, bombs, torpedoes and aviation fuel. These ships became infernos as the bombs struck home, one after another. By the end of the battle on 6 June, four Japanese carriers – Akagi, Kaga, Hiryu and Soryu – had been sunk, to just one lost by the Americans, USS Yorktown.



■ American submarines, such as the USS Tang, inflicted huge losses on Japanese merchant shipping during the Pacific War





■ General Walter Krueger
commander of US 6th Army
which was slated to conduct
Operation Olympic in late 1945

BRINGING DOWN THE EMPIRE

With American forces at Japan's doorstep, General Douglas MacArthur offered a plan for the invasion and defeat the empire

By late spring 1945, Imperial Japan was at bay. Its navy had been sunk and its island strongholds had been demolished, one after another. The American Joint Chiefs of Staff presented a broad plan for the defeat of Japan but left the development of the specifics to their subordinates. On 28 May, General Douglas MacArthur responded with Operation Downfall, his comprehensive plan for an amphibious invasion of Japan's Home Islands.

The defeat of Japan would require two amphibious operations. The first, code-named Operation Olympic, would see the southern island of Kyushu hammered by American airpower. This aerial assault would be followed by an amphibious landing comprising over 750,000 soldiers supported by over 1,300 amphibious ships and approximately 2,000 aircraft. The target date set for the launch of Olympic was 1 November 1945.

Olympic was to be followed by an even larger assault in the late winter of 1946. Operation Coronet, with a planned date of 1 March, was to involve over 1 million troops supported by over 3,300 airplanes and a vast armada of warships and naval transports. MacArthur himself planned to personally lead a 14-division assault force for Coronet, which had as its intended landing site the region of Tokyo-Yokohama on the island of Honshu.

As events unfolded, the invasion of Japan was rendered unnecessary as a result of Japan's surrender following the devastating atomic bombings of Hiroshima and Nagasaki. There can be no question, however, that both Olympic and Coronet, had they gone forward, would have been tremendously costly to both the victor and the vanquished, with estimates of 400,000 to 800,000 US casualties and between 5 and 10 million Japanese dead.

■ The Essex-class aircraft carrier USS Intrepid, November 1944



In addition to the loss of the precious carriers, the Japanese also lost many of their highly trained and hard-to-replace carrier pilots, a loss that would never be made good.

The Battle of Midway transformed the war. Coming just six months after Pearl Harbor, the Japanese Navy had been mauled, and the United States now held the initiative. Victory at Midway did not mean victory in the war as a whole, however. The United States had to begin the long fight to push the Japanese out of their many island bases that dotted the western Pacific.

THE FIGHT FOR GUADALCANAL

The vast Pacific theatre was divided roughly between General Douglas MacArthur, commanding the southwest Pacific theatre, who would drive west and north along New Guinea and nearby islands towards the Philippines and Japan, and Admiral Chester Nimitz, who held command of the US Pacific Fleet. Nimitz would drive westward through the Central Pacific, capturing widely scattered atolls and islands in the relentless drive towards Japan's Home Islands.

American attention fell first upon the Solomon Islands in the South Pacific. A Japanese seaplane base on the island of Tulagi was suppressed, several other small islands were taken, and a landing was made on the Japanese-held island of Guadalcanal on 7 August 1942.

The Americans initially met little resistance from the Japanese occupying the island and quickly accomplished their primary task of capturing the airfield that the Japanese had been building before the second day of the operation was over. The Americans completed its construction and renamed it Henderson Field.

Guadalcanal was within reach of Japanese warplanes based at Rabaul on the island of New

Britain, and these subjected the Americans to punishing air strikes. A large Japanese naval assault resulted in the nighttime Battle of Savo Island, in which the US Navy was worsted. The Americans decided to withdraw their vulnerable ships out of the area for their own safety. Unfortunately, the transport ships still contained most of the heavy equipment of the 11,000 US Marines now ashore.

The island itself was also still home to several contingents of Japanese troops, and these had to be rooted out. While these were being hunted, Henderson Field became home to Allied fighters and dive bombers. The Japanese had not given up on Guadalcanal, however, and in addition to repeated air attacks, they landed new troops to battle the American marines.

Japanese soldiers came ashore, but in dribs and drabs, with a first landing of 1,000 men made on 19 August. They launched an attack against Henderson Field but were wiped out by the marines. Another force of 2,000 soldiers next neared Guadalcanal. It was protected by warships of the Imperial Navy, and these tangled with the US Navy on 24-25 August. Fierce air battles erupted with American carrier planes, supported by those flying out of Henderson Field, in the Battle of the Eastern



Image: Getty Images (Krueger)

Solomon Islands. The Japanese amphibious assault ultimately went ahead, but only after being pummelled by US forces.

With US aircraft exacting a high toll on their forces, the Japanese switched to night landings. Dubbed the 'Tokyo Express', Japanese destroyers would steam through the darkness to evade American detection to drop off small groups of soldiers. A large force of Japanese soldiers was steadily built up this way. On 12 September, they struck the defenders on Edson's Ridge. The marines were attacked by a force three times their size but held on by their fingernails. Some Japanese troops managed to get around the marines, but their advance was blocked by other American troops. The Japanese continued to try to break through to Henderson Field, but when success proved elusive they broke off their attacks after two days of fierce fighting and withdrew.

After both sides had brought in reinforcements, the fight continued for Henderson Field through the remainder of September and into October 1942. At sea, US naval forces pounded the Japanese in the Battle of Cape Esperance, but the Japanese did manage to get their transport ships through to

land more troops ashore. By mid October, the Japanese had pulled together a major striking force of 20,000 men. Attacking on 23 October, the fanatically driven Japanese managed to breach the perimeter of Henderson Field, but they could not dislodge the American troops. On 26 October the attack was discontinued and the Japanese again withdrew.

The United States had the edge at sea during most of this time and the Americans were soon

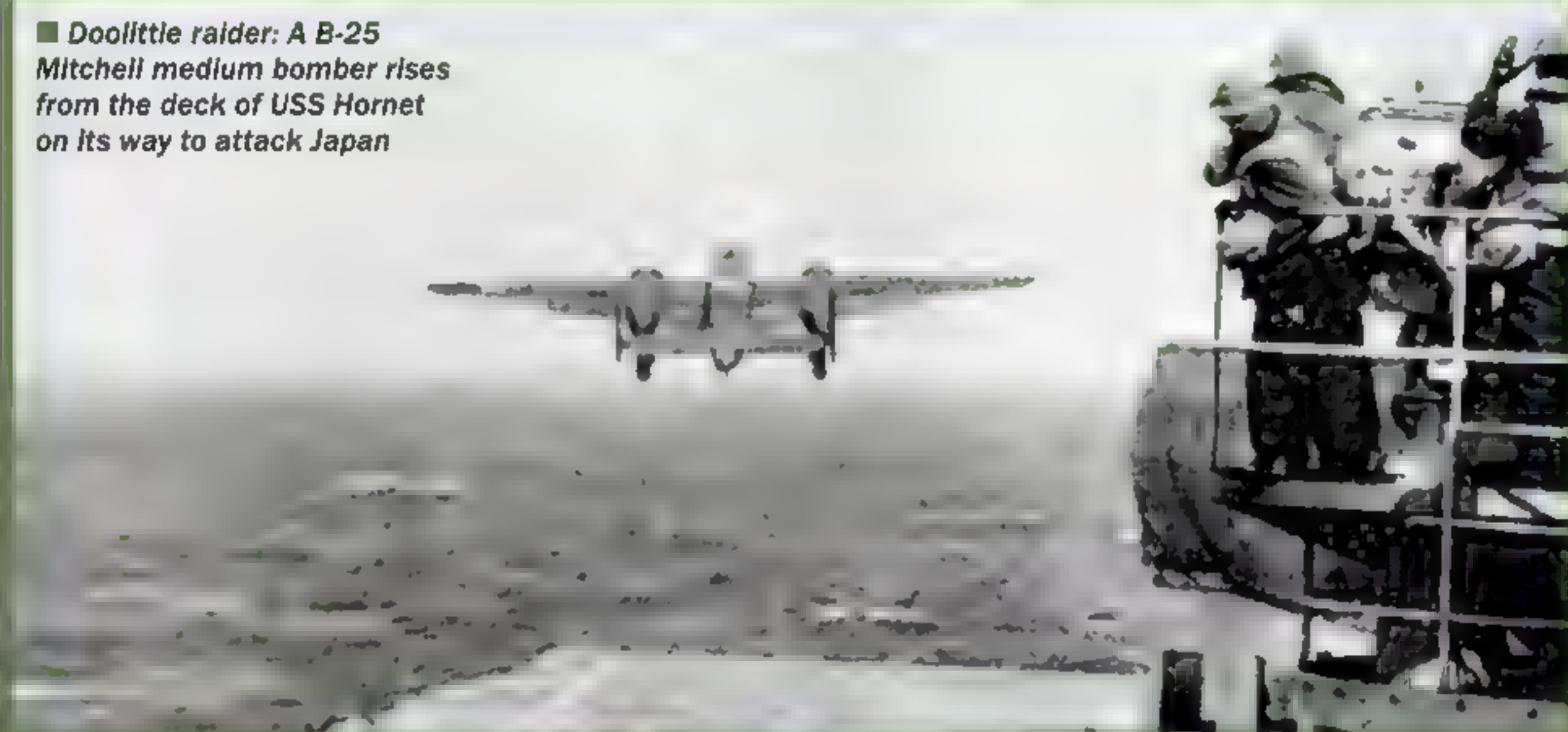
winning the race to resupply and reinforce their troops on Guadalcanal. In the naval battle there, fought on 13 November 1942, the US Navy sank the Japanese battleship *Kirishima*, preventing it and its companions from shelling Henderson Field.

Beset by supply problems and hampered, just as the Americans were, by the difficulties of operating in a jungle environment, the hungry Japanese saw that they could not succeed. By early February 1943 they had given up the hopeless struggle for Guadalcanal and evacuated their remaining troops. America had won its first great victory on land in the Pacific War.



The Mitsubishi A6M Zero was the bane of Allied fighter pilots in the early years of World War II.

Doolittle raider: A B-25 Mitchell medium bomber rises from the deck of USS Hornet on its way to attack Japan



THE AFTERMATH OF 30 SECONDS OVER TOKYO

The harrowing air raid led by Lieutenant Colonel Jimmy Doolittle against Japan had an effect on the Pacific War out of all proportion to the physical damage it caused

The April 1942 Doolittle Raid, conducted by a mere 16 medium bombers, did scant harm to Japan, but it achieved results far greater than the number of bombs it dropped would suggest. It overjoyed Roosevelt, who was eager to demonstrate that the United States was hitting back and hitting back hard. Coming just four months after the US Navy's Pacific Fleet had been pummelled at Pearl Harbor, the mission boosted American morale after a long winter in which it seemed that everything had been going Japan's way. The bombing mission also showed that the Empire of Japan was not invincible.

It was among the Japanese themselves that the psychological shock of the raid was most profound. Senior Japanese military officers were mortified that the American airmen had slipped

through their defences and by dropping bombs, however few they might have been, placed Emperor Hirohito, who resided in the Imperial Palace in Tokyo, at risk. Most of the participating American airmen made crash landings or bailouts in China and survived, but a few were captured in that country by Japanese forces, and three were subsequently executed by the vengeful Japanese.

To prevent a repeat of the Doolittle Raid, Japanese strategy focused on the destruction of the US Pacific fleet, and thus the ill-fated Midway operation was set in motion. In addition, hundreds of fighter aircraft were devoted to defending Japanese skies, though they might have been more profitably used elsewhere in the Pacific theatre.

ISLAND HOPPING

The war in the Pacific would involve more than mere combat. World War II was a war of production too, and one at which American industry would excel, churning out huge amounts of equipment, including ships and warplanes. The Japanese were soon outnumbered, as well as outclassed, by resurgent US forces.

Flying from brand-new, state-of-the-art Essex-class aircraft carriers, soldiers in fighters such as the Grumman Hellcat and Vought Corsair shot Japanese Zeros from the sky in huge numbers. Beneath the waves, American submarines destroyed the Japanese merchant navy, making it nearly impossible for the Japanese to import fuel or raw materials. Despite being everywhere on the defensive, the Japanese were determined to make the Americans pay a heavy price for every island they took from them.

In the southwest Pacific theatre, MacArthur's men pushed west along the coast of New Guinea. Rabaul, a powerful Japanese fortress on New Britain, was judged too strong to attack head-on, so instead it was isolated by capturing islands around it and hitting it repeatedly with air raids, thereby neutralising it.

Additional revenge for the attack on Pearl Harbor was taken on its primary planner, Admiral Yamamoto, in April 1943. American codebreakers had learned when and where his plane would be flying and duly sent a fighter squadron to intercept him on his way to the South Pacific island of Bougainville, where he was shot down. With their finest military mind dead, the Japanese could find no answer to the American challenge, which was far better supplied than their own.

American military planners tried to be as economical in the lives of their fighting men. Instead of driving the Japanese out of every island they held, they decided that their ground forces, aided by the warships of the growing US Navy and land-based airpower, would bypass some Japanese-held islands and take only those most necessary to sustain the advance across the Pacific.

American forces would thus 'hop' from island to island, allowing the bypassed Japanese garrisons to 'wither on the vine' as they ran out of supplies. So strong was the US Navy becoming that in the later stages of the war, Japanese submarines were often the only sure means by which to resupply isolated garrisons left behind in the wake of the US advance.

To take the islands held by the Japanese, the US Marines developed amphibious landing tactics to a high degree. A harrowing test of these methods came at the Battle of Tarawa, one of the United States' earliest island-hopping operations. On 20 November, the 2nd Marine Division went ashore on Betio Island, part of the Tarawa Atoll, but an underestimation of the difficulties posed by an offshore reef kept them from closing on the beach immediately. Many marines had to wade several hundred yards to shore, all the while under intense Japanese fire.

Casualties over the three-day battle, ending on 23 November, were very heavy, with the 2nd Marine Division suffering almost 1,000 dead and close to 2,400 wounded, all for an island that measured a mere two miles in length. The marines who took the island showed immense courage, and four of their number were awarded the Medal of Honor. The Japanese soldier too had shown himself to be a formidable opponent and worthy of respect. If the bloodbath at Tarawa had any silver lining, it was that it allowed the US Marines to refine their amphibious landing tactics for future operations against strongly defended islands.

The westward American drive continued. The island of Saipan was taken by Nimitz's forces in June-July 1944. Tinian was also captured, and US B-29 bombers would soon be flying missions against Japan's Home Islands from runways on them.

The Imperial Japanese Navy was faring no better at sea than its army brethren did on land. In the Battle of the Philippine Sea, fought 19-20 June 1944, it was mauled by



■ The Balao-class submarine USS Archerfish, the bane of Japan's giant aircraft carrier Shinano. US Navy subs like Archerfish also crushed the Japanese merchant navy

THE WAR BENEATH THE WAVES

American submarines, waging an unrelenting war, tore the heart out of Japan's merchant navy in the Pacific

American submarines enjoyed spectacular successes against Japanese merchant shipping, sinking over 1,300 vessels, totalling about 5.3 million tons. This prodigious achievement came despite early troubles with American torpedoes, whose defects were not resolved until late 1943.

The noose that the submarines tightened around Japan reduced its imports of raw materials from more than 16 million tons in 1943 to just 10 million in 1944. By war's end, the Japanese merchant navy was a pale shadow of its former self. The sinkings by US Navy subs, together with the hammer blows being delivered by American B-29 bombers, brought the Japanese economy to the brink of collapse.

American submariners' successes came not only against Japan's merchantmen. They also scored some impressive victories over

Japanese warships, including Shinano, Japan's newest aircraft carrier. The largest carrier ever constructed until then, she was sunk during her maiden voyage on 29 November 1944 by the prowling USS Archerfish.

The US Navy's return on its investment in its submarine force was dramatic. Despite less than two per cent of its servicemen serving aboard subs, these men were responsible for some 55 per cent of Japan's shipping losses during the Pacific War.

The submariners' task was also made easier because the Japanese Navy, obsessed with the idea of a decisive battle with the US Pacific Fleet, failed to devote sufficient resources to protecting merchant ships from enemy submarines. Often alone, these ships were completely at the mercy of the submarines prowling below them.

US Navy carrier aircraft, losing three aircraft carriers, over 600 of its own carrier aircraft and many trained pilots. The Japanese found it very difficult to replace lost pilots, and the qualitative edge swung ever more strongly in favour of the American flyers they faced, whom the US Navy was producing in large batches.

MACARTHUR RETURNS

In early 1942 Douglas MacArthur had promised that he would return to liberate the Philippines, and by the middle of 1944, having taken New Guinea, he was ready to do so. MacArthur argued strongly for the liberation of the Filipino

"CASUALTIES OVER THE THREE-DAY BATTLE WERE HEAVY, WITH THE 2ND MARINE DIVISION SUFFERING 1,000 DEAD"



Image: Getty Images (two times)



■ US marines do battle on Okinawa, May 1945



The surrender ceremony of Imperial Japan taking place on the USS Missouri

people, seeing it as a moral imperative, but Nimitz was opposed to launching such an operation, deeming it too costly. MacArthur won the argument, however, and the invasion of the Philippines went ahead.

The island of Leyte in the central Philippines was the site of the first American landings on 20 October 1944. The Japanese planned a massive, multifaceted attack on the American invasion armada. In their Sho-1 plan, four separate fleets would converge on the Philippines with the ultimate aim of annihilating the American transports laden with troops and supplies.

The vulnerable invasion fleet inside Leyte Gulf was protected by large numbers of American warships, but the Japanese Navy, using a decoy fleet, managed to lure away most of them, and only the bravery of a handful of US Navy escort carriers and destroyers managed to stave off disaster in the Battle of Samar.

The Battle of Leyte Gulf, as the naval conflict became known, was actually a series of four separate engagements fought in Philippine waters and has gone down in history as the biggest naval battle ever fought in terms of the number of warships involved. Apart from Samar, the US Navy met and defeated a Japanese fleet in the Battle of the Sibuyan Sea on 24 October, the 69,000-ton super battleship Musashi among their many victims.

The Battle of the Surigao Strait, fought on 24-25 October, saw US warships engage the oncoming Japanese at night in an old-fashioned naval fight that relied on guns, not airplanes. The Americans emerged victorious, sinking the Japanese battleship Yamashiro and heavily damaging another, Fuso.

Admiral William 'Bull' Halsey, originally tasked with guarding the landings at Leyte, had been lured away by yet another Japanese fleet, opening the way to the landing zone, and disaster had only barely been narrowly averted by the Americans' heroism off Samar. Halsey's 3rd Fleet eventually caught up with the Japanese decoy fleet, and his carrier planes devastated its ships at the Battle of Cape Engano on 25 October.

On land, MacArthur proceeded to demolish the Japanese wherever he found them. The liberation of the Philippines would be a slow and costly campaign, with the Japanese fighting with their customary fanatical determination. The fight for Leyte came to an end by early December, but only after 70,000 Japanese and over 15,000 American lives had been lost.

IWO JIMA AND OKINAWA

The next target in the advance was the small volcanic island of Iwo Jima, where three US Marine divisions landed beginning 19 February

1945. Defending this rock of just 21 square kilometres in the midst of the Pacific were roughly 22,000 Japanese soldiers taking cover in 1,500 bunkers scattered across the island, all linked by 26 kilometres of tunnels.

This underground system of fortified positions prevented the three-day-long bombardment by American naval guns from doing serious harm to the defenders. The Japanese would have to be overcome by American troops at close range with rifles, grenades and flamethrowers. Of the Japanese troops garrisoning Iwo Jima, 99 per cent would die in the battle.

The cost to the marines who took the island was also enormous. In the month-long battle, which ended on 25 March, they took a mind-boggling 26,000 casualties, over 6,800 of whom were slain. So ferocious was the fighting on Iwo Jima that an astounding one out of every four Medals of Honor awarded throughout the war were given to men who had fought there.

The battle also supplied one of the most iconic images of the war – the raising of the American flag atop Mount Suribachi by a handful of marines. One great benefit of the vast amounts of blood spent taking Iwo Jima would be its use as an emergency landing stop for damaged or troubled American B-29 bombers taking part in the bombing



■ US President Harry S. Truman, center, meeting with Winston Churchill and Joseph Stalin at Potsdam, Germany, July 1945



The Japanese delegation on the deck of the USS Missouri for the formal surrender of the Empire of Japan, 2 September 1945

campaign against Japan, which was increasing in size and scope.

Iwo Jima would not be the last island battle of the war. On 1 April, a massive US Navy armada began landing an invasion force of 182,000 troops on Okinawa, a 60-mile-long island in the Ryukyu chain. As they had at Iwo Jima, the Japanese, aware of the Americans' tremendous firepower, prepared deep defensive positions for the carnage to come.



The atomic bomb, dubbed 'Little Boy', dropped on Hiroshima, 6 August 1945

Lieutenant General Mitsuru Ushijima commanded the 77,000-strong Japanese garrison. He intended to wait to strike at the invading Americans, allowing Japanese kamikaze suicide aircraft to decimate the US Navy ships offshore. Kamikaze warplanes struck beginning 6 April and took a frightful toll on the Americans. Even the grand Japanese super battleship Yamato was sent on a one-way suicide mission against the American fleet. She was spotted and hammered so fiercely by US carrier aircraft that she exploded and sank before she ever got close to Okinawa. Ushijima's counterattack on 12 April was repulsed by the American invaders, as was his next on 3 May.

By 21 June the battle for the island was over, but the price had been huge. Some 7,600 Americans had been killed and 31,000 wounded. Around 5,000 American sailors had also been injured as a result of the deadly kamikaze attacks on Navy ships. The Japanese

suffered far worse, with some 142,000 casualties, including many thousands of civilian Okinawans who were caught in the crossfire.

THE END IN THE PACIFIC

Both Iwo Jima and Okinawa were considered but a foretaste of what was to come when American forces invaded the Japanese Home Islands. American planners were horrified by the prospect of the huge casualties they were certain their forces would incur when the invasion went forward. Invading troops would face not only the fanatical Japanese Army but a fanatical populace as well, all determined to die in the defence of the emperor.

The B-29 bombing campaign had ruined Japan's cities, with Tokyo itself being devastated in a nighttime firebombing attack on 9-10



The devastated ruins of Tokyo after the B-29 firebombing raid of 9-10 March 1945

March 1945. Though Japan's war machine was running on close to empty and its people were near to starving, there was no indication that the Japanese were ready to consider surrendering. Despite all of the damage the bombers had inflicted and the economic pain caused by US submarines, the Japanese were determined to fight to the last. It seemed that the only way to bring the war to an end was through a tremendously costly invasion.

So when the atomic bomb, developed and built in great secrecy, became available in the summer of 1945, the new US leader, President Harry S Truman, made the decision to use it. Anything that might bring about an end to the war without the need to invade Japan would save hundreds of thousands – if not millions – of lives, both American and Japanese.

Truman allowed the Japanese the chance to make peace before approving the use of the atomic bomb. On 26 July 1945, at a meeting of Allied powers in Potsdam, Germany, the US, Great Britain and China issued the Potsdam Declaration. Japan was called upon to surrender, demobilise its armed forces and withdraw from all imperial territories, effectively bringing its empire to an end, but this would have been an inescapable and expected consequence of defeat in any case.

Unfortunately, the Japanese Government responded unfavourably to the Declaration and the war continued. Faced once more with the same unpalatable prospect of a bloodsoaked invasion of Japan, President Truman gave his go-ahead for the use of atomic weapons against it.

The first city struck was Hiroshima. The B-29 Superfortress Enola Gay dropped Little Boy, a uranium-based atomic bomb, on the city on 6 August 1945. Three days later, on 9 August, a second, plutonium-based bomb, nicknamed Fat Man, was dropped on Nagasaki. The shock of the atomic bombings, coupled with the Soviet invasion of Manchuria on 9 August, forced the Japanese to agree to surrender, with the condition that the emperor would be left on his throne. With this provision met, on 2 September 1945 the formal surrender of the Empire of Japan took place on the deck of the battleship USS Missouri in Tokyo Bay, with General MacArthur presiding. The Pacific War was over, but peace had come at an enormous cost to both Japan and the United States.



FLAG OF FREEDOM

23 February 1945

One of World War II's most enduring images, the sight of a group of American marines raising the US flag atop Mount Suribachi on 23 February 1945 signalled a key victory on the road to defeating Japan. Snapped by photographer Joe Rosenthal, it went on to win a Pulitzer Prize.





JAPAN VS AMERICA

■ A kamikaze attack on carrier USS Belleau Wood off the coast of Luzon left a fire that killed 92 crewmen



The DIVINE WIND of DEATH

INSIDE THE CULTURE OF SACRIFICE AND NATIONHOOD
BEHIND JAPAN'S KAMIKAZE PILOTS

WORDS BY MIGUEL MIRANDA



Ihey called it the Pacific War. Barely three years after the spectacular success at Pearl Harbor, the Imperial Japanese Navy (IJN) was on its last legs. From Midway to Palau, Japan suffered losses – carriers, cruisers, submarines, planes and men – that couldn't be replaced even with the utmost effort to maximise industrial production.

In the last quarter of 1944, any remaining hope for victory over the Allies was brutally quashed. On 12 October, US Army aircraft clashed with the Japanese planes stationed on Formosa, and more than 300 Japanese planes were lost, denying air cover for the garrisons in the Philippine Islands. The latest intel revealed that a vast American armada was steaming towards Leyte Gulf unopposed. There weren't enough combat aircraft to block an amphibious landing, and it would take days before two flotillas that had been sent from Singapore and Japan arrived. Desperate times called for desperate measures.

On 17 October, the same day the US Sixth Fleet began its assault on Leyte, Vice Admiral Isoroku Yamamoto set foot in Luzon, the Philippines' largest island. He was the IJN's most vocal and brash air-power advocate who had led the IJN fleet to victory at Midway.

A week later, on the morning of 25 October, Japanese A6M Zeros from the 201st Air Group came in low and fast over Leyte Gulf. The previous day's missions had been difficult and inconclusive, but now the Sun was out and the American carriers were exposed just off Tacloban, Leyte's capital.

These were escort carriers – basically large hulls supporting broad wooden decks loaded with fighters. They were first used in the Atlantic to hunt U-boats; in the Pacific, they became indispensable for air cover during landings. Escort carriers were so prolific that US shipyards built more than 120 of them, and they were in production right up until the end of the war.

The Zeros each carried a 500-pound bomb and pilots were determined to sink their targets even as the tracers from incoming AA guns menaced them. The squadron leader, Lieutenant Yūkiō Seki, was killed together with his men, their planes blown to fiery bits.

However, Lieutenant Seki was skilled enough to crash his plane on the USS St Lo's runway, his payload detonating below deck. It was a nightmare to behold: acrid black smoke engulfed the flattop as its crew abandoned.

The USS St Lo was the last American ship to be sunk by a kamikaze. It was the only one of its class to be sunk by a kamikaze. The ship was sunk on October 25, 1944, during the Battle of Leyte Gulf. The ship was the only one of its class to be sunk by a kamikaze.

**"IF ONLY WE MIGHT FALL
LIKE CHERRY BLOSSOMS IN THE SPRING –
SO PURE AND RADIANT!"**

– HAIKU OF AN UNKNOWN
KAMIKAZE PILOT

TRAINING FOR THE TOKKO TAI

BY EARLY 1945, THOUSANDS OF YOUNG MEN WERE BEING RECRUITED AND 'VOLUNTEERED' FOR A CAMPAIGN OF UNRELENTING AERIAL SUICIDE ATTACKS

With the Philippine Islands lost, Japan's generals and admirals were worried about an impending American sprint across the Pacific toward the mainland. To thwart this possibility, they envisioned dedicated special attack squadrons of suicide aircraft called 'tokubetsu kōgeki tai' or 'Tokko Tai' for short.

Tokko Tai formally became a new branch of the Army and Navy Air Corps in March 1945, after US forces captured Iwo Jima. The concept of suicide flights really began with an experimental weapon, the Ohka, but officers like Vice Admiral Onishi showed how planes excelled at the same role. It was during the battle for Okinawa that US intelligence picked up a new term from Japanese propaganda broadcasts: kamikaze. It recalled the tempest that annihilated Kublai Khan's invasion of Japan in the 13th century.

Young men, with or without flying experience, were given the choice to volunteer for the Tokko Tai if they were already enlisted. Many others, usually undergraduates still in university, were drafted. On multiple occasions, officers who volunteered were denied simply because their skills would be put to better use training the would-be kamikazes. Tokko Tai pilots weren't

brainwashed to venerate death, however. It was made perfectly clear their actions were a last resort. At its peak in the summer of 1945, Tokko Tai pilots were only given 30 hours of flight training in airfields outside the town of Chiran, in Kagoshima Prefecture.

If a mission was aborted, the Tokko Tai manual instructed that a pilot "should be jovial and without remorse" upon his return. Tokko Tai pilots flew with no special equipment or designation. Before flying, they scribbled a haiku, sipped from a cup of whiskey and tied a white hachimaki round their heads.

The excellent A6M Zero manufactured by Mitsubishi Heavy Industries, along with many older planes, was used indiscriminately in the Philippines and Okinawa. The ideal kamikaze tactic was to skim the waves as they neared an American warship. The coup de grace was to climb and then dive towards the area between the bridge and the smokestacks. In their last seconds of consciousness, it was suggested that pilots scream "hissatsu!" (meaning 'certain kill') to hasten a doomed ship's destruction.



Members of 72nd Shinbu Squadron. Kamikaze attacks the next day

Sentimentality also mattered for Tokko Tai pilots. Their manual told them to remember their mothers as they died. Upon death, they were assured that "all the cherry blossoms at Yasukuni shrine will smile brightly at you". In practice, many kamikazes were lost crashing into the water rather than their targets.

THE FATHER OF KAMIKAZE

TAKIJIRO ONISHI WAS A VETERAN PILOT CREDITED AS THE FIRST OFFICER TO ORGANISE A SUCCESSFUL SPECIAL ATTACK ON ALLIED FORCES

Born in Hyogo Prefecture on 6 June 1891, Takijiro Onishi's life coincided with the rise of Imperial Japan. Detailed biographies about him are very scarce and few go beyond crediting Onishi as the 'Father of Special Attack'. This supposedly originated from an unconventional tactic he explained to subordinates for crippling a US Navy aircraft carrier – by crashing a bomb-laden plane into it.

He was one of the first IJN fighter aces during the Second Sino-Japanese War (1937-45). A staunch patriot, Onishi also believed that it was unsound for Japan to wage war on the United States of America. Despite this, he is recognised as one of the planners behind the surprise attack on Pearl Harbor. Some kamikaze writers suggest Onishi was introduced to the concept of self-sacrifice among Japanese pilots in either 1943 or early 1944.

By the time he arrived in the Philippine Islands, Onishi had new orders – from exactly who is unknown – to organise a Special Attack operation using the squadrons of the 1st Air Fleet.

Like many of his peers, Onishi harboured serious doubts about the effectiveness of Special Attack tactics. It was particularly disturbing for an officer with his background, given his expert grasp of modern air combat.

Onishi kept his misgivings to himself. Like the rest of the IJN in 1944, he was gripped by a determination to do anything for the Japanese cause, more so with the Allies drawing near in ever greater numbers.

Onishi's personal conduct during the campaign to reconquer the Philippine Islands is unknown. But the Tokko Tai tactics he devised were still being carried out well into 1945 by IJN holdouts in the Philippines, with disappointing results. Back in Tokyo, Onishi knew, at least privately, that Special Attack tactics were squandering lives.

The architect of kamikaze met a terrible end. Hearing of the emperor's surrender message over the radio, the disheartened Onishi committed seppuku, or ritual suicide. But in a macabre twist, he was found a day later, on 16 August, writhing in agony. Having disembowelled himself with a knife, he was unable to slit his throat and refused a swift decapitation from a second. He lingered for hours before finally dying.

"HE WAS GRIPPED BY A DETERMINATION TO DO ANYTHING FOR THE JAPANESE CAUSE, MORE SO WITH THE ALLIES DRAWING NEAR"

■ Takijiro Onishi was responsible for some of the technical details of the attack on Pearl Harbor

CRACKING THE AIR LIKE THUNDER

FOR ALLIED WARSHIPS AND THEIR CREWS, THE LAST AND ONLY LINE OF DEFENCE FROM FANATICAL KAMIKAZES WAS GOOD OLD-FASHIONED FLACK

The Special Attack proved more ineffective the more it was used. Since the kamikazes were only used en masse in two campaigns – Leyte Gulf and Okinawa – a specific doctrine was never developed by the US Navy and Air Corps to counter them. Most kamikaze missions failed anyway, thanks to poorly maintained aircraft, shoddy training, and a far more lethal factor: US gunnery.

By 1945, US warships were equipped with incredible anti-air and anti-submarine weapons. The former included radar-assisted guns, AA gun batteries and rapid-fire cannons. Most effective were the twin 40mm Bofors mounted in nests on US Navy destroyers, carriers and transports. These ack-ack guns filled the air with flack at medium ranges.

If a lone kamikaze got too close, a 20mm Oerlikon or tandem .50-calibre machine guns

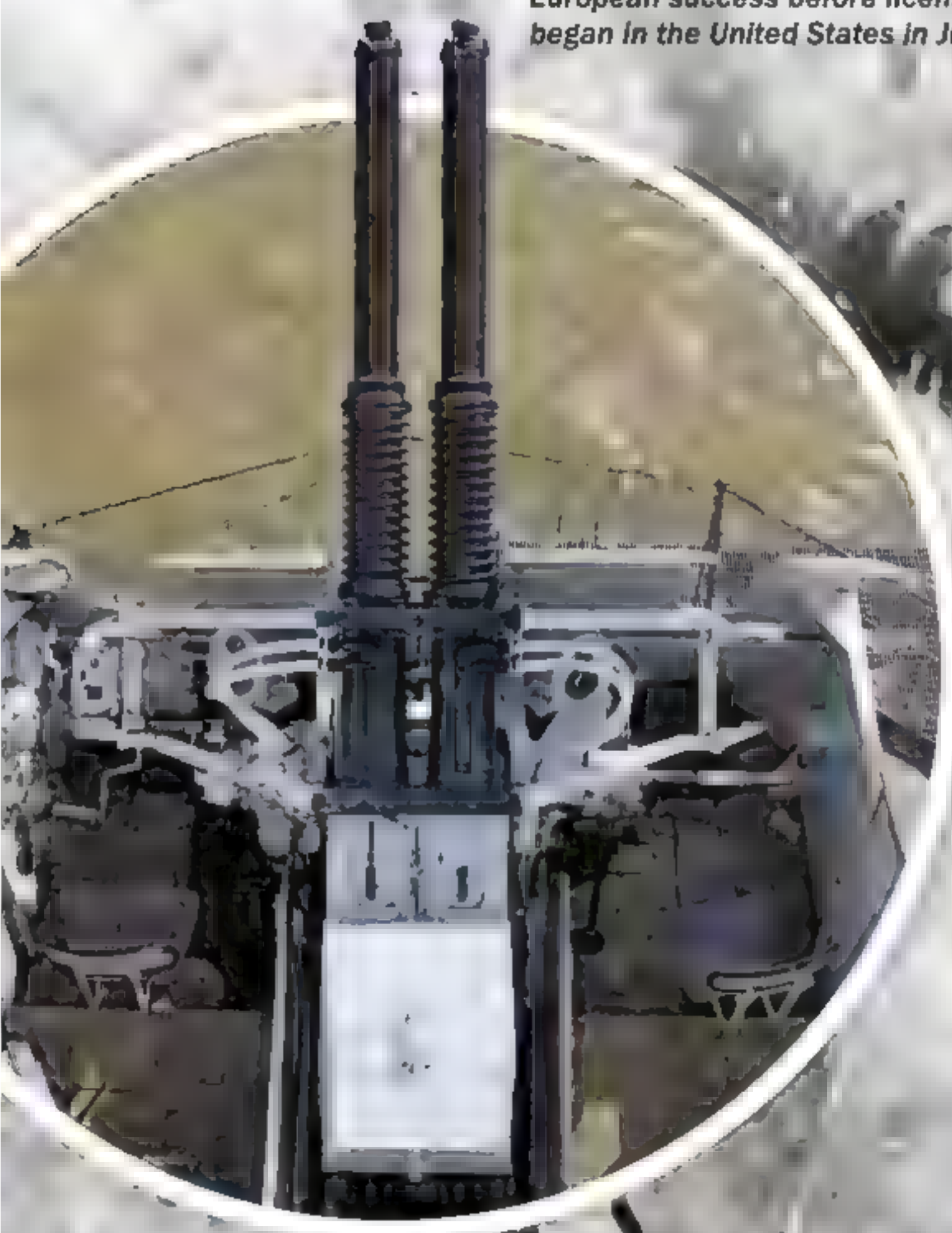
would blow it to pieces. Just as vital was US Navy air cover for blowing up any incoming suicide planes.

By the time Okinawa was firmly under American control, it proved to be the costliest battle in the Pacific Theatre. A total of 2,363 kamikaze attacks between October 1944 and 21 June 1945 left more than 5,000 US and Allied dead.

Approximately 40 Allied ships of all types were sunk. An additional 368 were damaged. A little more than a month after Okinawa, atomic bombs levelled Hiroshima and Nagasaki. Japan surrendered on 15 August. The last kamikaze squadrons were disbanded and the once-doomed pilots lived on to demobilise for peacetime. Over 70 years since, the kamikazes' notoriety remains a potent symbol of Japanese fighting spirit during World War II.



■ Below: The 40mm Bofors of Sweden was a European success before licensed production began in the United States in June 1941



**"IN BLOSSOM TODAY, THEN SCATTERED;
LIFE IS SO LIKE A DELICATE FLOWER.
HOW CAN ONE EXPECT THE
FRAGRANCE TO LAST FOREVER?"**

- ADMIRAL TAKIJIRO ONISHI

■ This image, moments before a kamikaze's impact, shows how Japanese pilots targeted aircraft carrier elevators at an impossible angle



MACHINE OF DEATH

WHILE THE KAMIKAZE'S MISSION WAS OFTEN FRUSTRATED BY MECHANICAL FAILURE, THEIR AIRCRAFT WERE SUPERB EXAMPLES OF ENGINEERING AND AERODYNAMIC INNOVATION



Japan entered World War II with the finest combat aircraft in Asia. The problem was that the USA could build more of its own fighters. Japanese planes also had weaker engines, less armour protection, and couldn't match the altitude of US heavy bombers.

For the Tokko Tai, however, the type of aircraft wasn't always important. The plan, drawn up at Tachiarai Joint Service Flight School outside Chiran as well as in other nearby airfields, was to deploy as many Special Attack formations as possible.

In 1945, there was still enough A6M Zeros left for use in kamikaze missions. Hundreds of the older A5M fighters were co-opted for the missions as well. Designed by the inventor and engineer Jiro Horikoshi in the late 1930s, the Zero was a lightweight marvel with superb manoeuvrability and an excellent 14-cylinder 1,130 horsepower engine.

At the beginning of Japan's Pacific War, the Zero proved its superiority over American rivals like the F4F Wildcat. More than 10,000 Zeros would be built, but the gradual loss of IJN

carriers in Midway, the Philippine Sea and other battles limited its effectiveness.

The advent of Tokko Tai tactics marked the Zero's undoing. With insufficient armour plating, countless numbers of them were blown to bits as they approached US warships. The IJN Air Corps officers used aircraft like ordnance and cared little for keeping their planes airworthy. This, along with diluted aviation fuel supplies, explains the high rate of failure among Special Attack missions.

Once a Tokko Tai pilot was selected and trained, his plane was given enough fuel to reach the area of operations. A single 500-pound bomb was loaded along with ammunition for the twin 7.7mm machine guns and 20mm cannons. Barring a mid-air crash or an accident, the Tokko Tai pilot embraced his end as he flew to his target.

TANDEM ARMAMENTS

The Zero carried two light machine guns and a pair of nastier surprises. These were two Type 99 20mm cannons, one on each wing. Based on the Swiss Oerlikon, the Allied ships also used the same gun on incoming Zeros.

THE IMPERIAL CHAMPION

Entering production in 1940, the A6M Rensen or Zero became notorious in China for defeating any aircraft that flew against it. During the months after Pearl Harbor, it continued winning dogfights against many Allied planes it faced in the air.

■ Below left: Zeros prepare for takeoff to take part in the first wave of the attack on Pearl Harbor

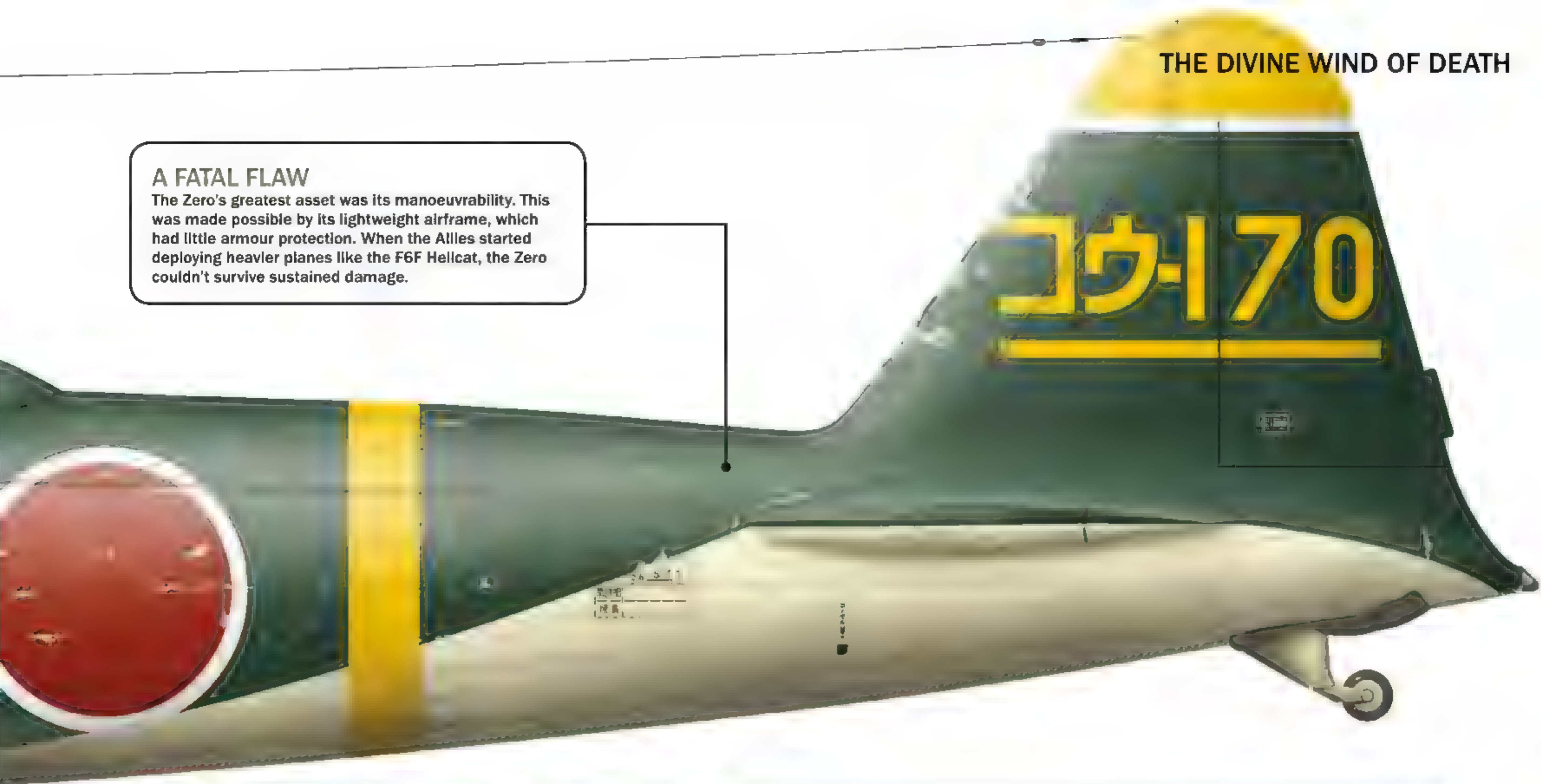
■ Below centre: The one-man cockpit of an A6M5 Zero Model 52

■ Below: A Mitsubishi A6M2b Zero from the Zulkaku Aircraft Group during the attack on Pearl Harbor



A FATAL FLAW

The Zero's greatest asset was its manoeuvrability. This was made possible by its lightweight airframe, which had little armour protection. When the Allies started deploying heavier planes like the F6F Hellcat, the Zero couldn't survive sustained damage.



A FINAL FLIGHT

MOST TOKKO TAI PILOTS WERE DETERMINED TO KILL THEMSELVES, BUT ON ONE OCCASION, FATE HAD OTHER PLANS FOR AN UNLUCKY FLIER

For thousands of American sailors and pilots, thwarting the incoming kamikaze was a living nightmare. Surviving the experience naturally inspired a curious regard for the Japanese, who seemed so eager to vanquish them. Soon after the war's end, a story ran in *Yank*.

■ Grim proof of Onishi's handiwork. Once Tokko Tai missions began in October 1944, any large Allied ship was fair game



the US Army's weekly news magazine, about the experiences of a genuine kamikaze pilot. Contrasting the often one-dimensional and racist depiction of Japanese servicemen, the profile of Norio Okamoto tackles its subject matter with a little humour.

Okamoto fit the profile for a Tokko Tai candidate. A 23-year-old flight instructor wanting to avenge a brother killed on Formosa, he volunteered with grim enthusiasm. Okamoto then revealed a rare courtesy extended to Tokko Tai pilots. Before their deployment, they were

allowed to write a short letter home. He wrote to his parents for delivery after he died.

But he was soon disappointed by his treatment at the hands of the Tokko Tai officers. Not that he was abused or maligned, rather Okamoto was forced to endure lectures about the virtues of ancient samurai and sent off on 'an old sea plane'.

Okamoto crashed halfway to Okinawa due to engine failure and was stranded at sea with his navigator, who perished in the shark-infested waters. After hours afloat, he reached an island inhabited by suspicious natives deathly afraid of US air strikes. He was well fed and sat out the war until its end.

Interestingly, Okamoto didn't mind helping himself to boxes of American C-rations that floated ashore. He wasn't bitter towards his country's occupiers either. Okamoto aspired to become a trader of imported merchandise.

Numerous accounts of Tokko Tai pilots and their experiences have been published since 1945; just as many films and documentaries are released based on their memoirs.

But not all recollections were as light-hearted as Norio Okamoto's. For Warrant Officer Shoichi Ota, who carried out the doomed Ohka programme with its emphasis on a manned bomb, the stigma of being involved in Special Attack activities was too much to bear.

A rumour spread that he crashed a plane into the sea after Japan's surrender. It turned out that he changed his name during the Allied occupation of Japan and raised a family, putting his past behind him. He never spoke about his role during the war until he became unwell in his old age. Shortly before his death in 1995, he finally confessed to his son.

STATE SHINTO AND THE GOD EMPEROR

WHAT WERE THE UNDERLYING REASONS BEHIND JAPAN'S CULT OF SELF-SACRIFICE AND WHY DID SO MANY YOUNG MEN ACCEPT THEIR ROLE AS KAMIKAZES?

There are still many false assumptions surrounding the kamikaze of World War II. Most striking is the belief that it was embraced by the IJN as a credible strategy. For Tadanao Miki, an engineer tasked with building the Ohka flying bomb, it was first mentioned to him. What made its practice widespread, especially during the Okinawa campaign, was the profound sense of duty among Japanese servicemen and citizens. This propaganda inspired so many volunteers: it was certainly a noble death, but it was for a higher cause.

Japanese soldiers, being patriotic to the core, weren't obsessed with dying either. Death in battle was a last resort and many kamikazes who survived the war admitted a reluctance to squander their lives.

Although Japan's samurai heritage is often pointed out as an inspiration for suicidal actions in battle, it's quite ironic that the samurai ideal of 'bushido' in its

classical sense wasn't immediately intertwined with the conduct of kamikaze pilots. When the Yasukuni shrine was erected in Tokyo in 1869, the final year of the Meiji Restoration that replaced the Tokugawa Shogunate, Japan slowly shed its feudal system and its values. Instead, Yasukuni represented Japan's newfound modernity and the emperor's place in it.

After a Prussian-influenced constitution was adopted in 1898, a deference for state institutions began to mould the national character. This meant total obedience to the emperor, whose word was law, and the emperor's importance above the needs of any individual.

This state of mind was reinforced by powerful symbolism. The emperor was the living God, the Sun Goddess, and the Navy.

Japanese servicemen began sacrificing themselves as soon as the tide began to turn against their country. The critical moment was the arrival of American long-range bombers in 1944. Unable to defeat American B-29s with machine guns, remote incidents of fighter pilots ramming their planes began to warrant notice.

A growing awareness of Japan's vulnerability influenced the suicide ideal among the officer class. With the tacit endorsement by the Japanese high command, those responsible for the Ohka flying bomb programme and willing to die for their country were encouraged to continue the force despite its low chances of success.

Below: Kamikaze pilots at the Imperial Japanese Chiran air base in Chiran, Kagoshima, toast cups of sake before departing on their Tokko Tai missions.

■ A human deity who lived in secluded splendour, Emperor Hirohito is believed to have secretly approved of the Tokko Tai program.

THE CHERRY BLOSSOM TAKES FLIGHT

LIKE A CRUDE EXOCET, A RESOURCE-POOR JAPAN MANAGED TO BUILD A VIABLE ANTI-SHIP MISSILE. BUT COULD IT TURN THE TIDE?

As early as 1943, the Aeronautical Research Laboratory was tasked with developing a rocket-powered 'flying bomb'. In or before August 1944, Warrant Officer Shoichi Ota told a befuddled Lieutenant Commander Tadanao Miki that in lieu of a guidance system, his team should just install a cockpit on the MXY7 Ohka, the primitive cruise missile they referred to as cherry blossom.

The suggestion launched the Divine Thunder God Corps, the IJN's newest elite unit and the original Tokko Tais. The Thunder Gods were supposed to steer their missile, which was packed with 2,600 pounds of explosive, to a target after being dropped in mid-air by a 'mother ship' – a bomber.

There was precious little time to organise, train and equip the Thunder Gods for their deployment. The first batch of Ohkas were supposed to be deployed in the Philippine Islands in 1944 but their transport, the aircraft carrier Shinano, was sunk by an

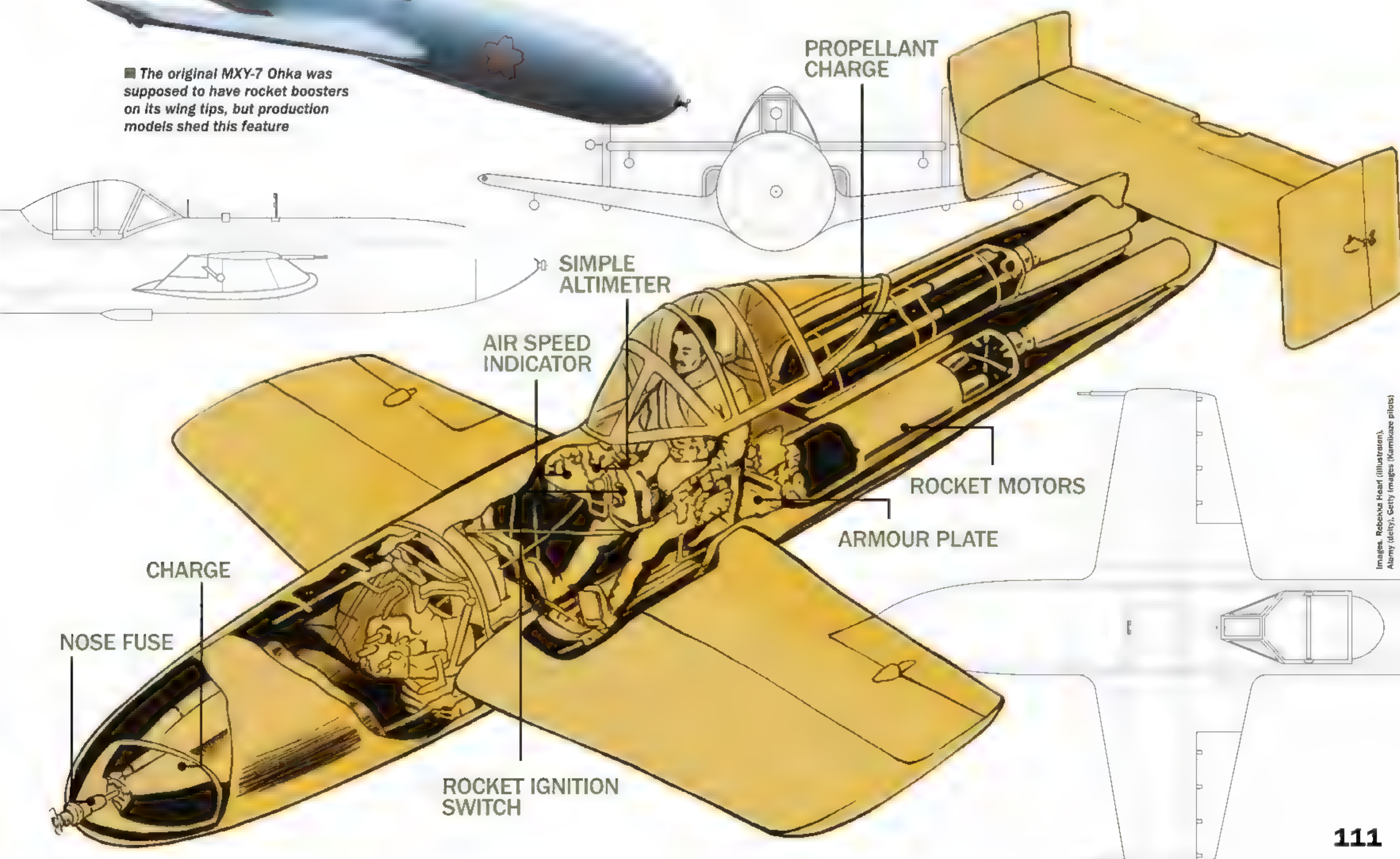


Air crew relax in front of a Mitsubishi bomber loaded with an MXY7 Ohka plane

American submarine. The largest Thunder God mission involved a flight of 18 G4M medium bombers heading for Okinawa. The formation was intercepted by US warplanes and destroyed. Later in the Okinawa campaign, a single Ohka reportedly managed to target the destroyer USS Mannert L Abele and sink it.

The concept behind the Ohka might have been futuristic, but these cherry blossoms repeatedly failed their missions. When US forces seized production models of the Ohka on 1 April 1945, they re-christened it the Baka – Japanese for 'stupid'. Maybe because it was April Fool's Day, or perhaps the idea of a piloted bomb was too silly to comprehend.

■ The original MXY-7 Ohka was supposed to have rocket boosters on its wing tips, but production models shed this feature



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TURNING DEFEAT INTO VICTORY

PEARL HARBOR PROVED THAT A NOBLE DEFEAT COULD BE EVEN BETTER FOR PROPAGANDA PURPOSES THAN A STIRRING VICTORY

WORDS BY EDOARDO ALBERT



ar. It was something that President Franklin Roosevelt had worked towards but when it came, it was as unexpected as the bombs dropping on Pearl Harbor. Faced with the sudden arrival of warfare, the American government had to turn public outrage at the attack on Pearl Harbor into sustained support for a conflict that, it was clear, would last for years and cost dearly in terms of lives, material and money. But the problem was that outrage, by its nature, cannot last unless it is fed. What made the task more difficult was that there still remained in America a strong strand of support for isolationism and non-involvement in European wars.

However, the attack on Pearl Harbor changed everything. The America First Committee, which argued strongly against involvement in the war and that included among its members aviator Charles Lindbergh and future president Gerald Ford, had 800,000 supporters, making it a significant voice in American politics. However, following the Japanese attack on Pearl Harbor, the organisation voluntarily, and memorably, dissolved itself, stating:

"Our principles were right. Had they been followed, war could have been avoided. No good purpose can now be served by considering what might have been, had our objectives been attained. We are at war. Today, though there may be many important subsidiary considerations, the primary objective is not difficult to state. It can be completely defined in one word: Victory."

The Axis had played into Roosevelt's hands. Now he had to keep the public focused on the administration's war aims. His success in creating and maintaining national unity over the course of the war comes in stark contrast to the more recent divisions in America during the Vietnam War and following the 9/11 attacks. Both these later conflicts also saw a brief time of national unity, but subsequent bitter divisions over aims and policy.

One of the key factors in maintaining national unity during World War II was the creation, in June 1942, of the Office of War Information (OWI), tasked with disseminating propaganda



■ Allen Saalburg's iconic Pearl Harbor poster epitomised the propaganda use of the attack

"above and beyond the call of duty"



DORIE MILLER

Received the Navy Cross at Pearl Harbor, May 27, 1942

■ A hero conjured from a defeat: Dorie Miller wearing his Navy Cross

and war-related information. But the OWI was late in the game: in classic American fashion, private enterprise got there first. Just two days after Pearl Harbor, a group of patriotic writers formed the Writers' War Board, first to promote the sale of war bonds, then to provide the right words for government agencies that, left to themselves, spoke only bureaucrat. With members including Eugene O'Neill, Paul Gallico and Edna St Vincent Millay, the Writers' War Board was able to formulate and disseminate the Roosevelt administration's war aims in a way that the public could understand. With the intelligentsia onside, Roosevelt ensured that he would not face the same damaging dissent that would later leech legitimacy from the prosecution of the Vietnam and Iraq wars.

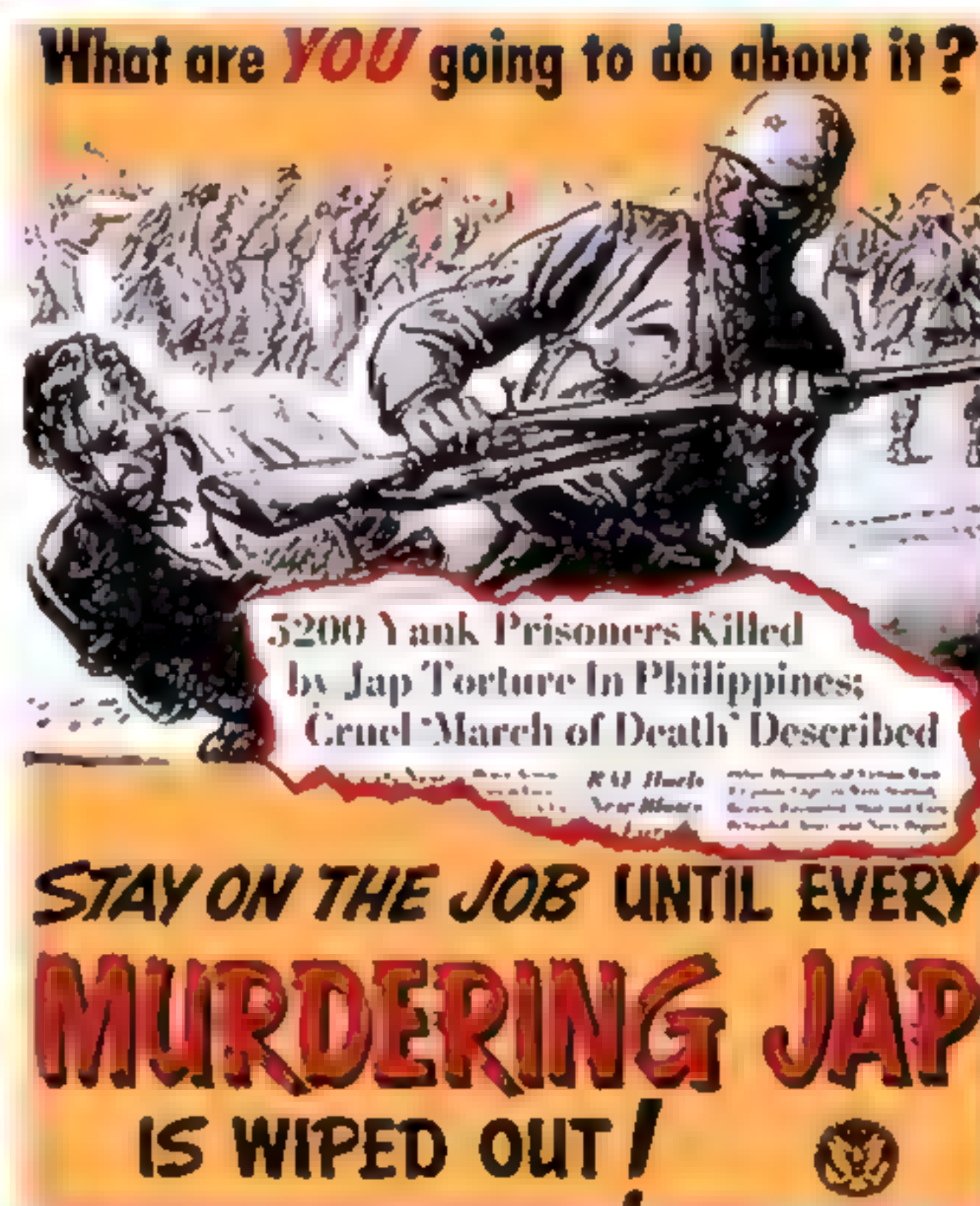
But if the Writers' War Board provided the words, it was Madison Avenue that provided the pictures. The American advertising industry, which had risen to prominence in the 1920s amid some considerable doubts as to the scale of its role in the developing consumer economy, embraced selling the war to the American people with all the fervour of an advertising executive making a pitch to a new corporate client. This was Madison Avenue's chance to do what it did best – selling – but for a good, patriotic cause. That the successful selling of the war would serve to cement the advertising industry's place in American life was merely a by-product of the undoubted patriotism that framed the initial surge of enthusiasm. But it was an extremely useful by-product for the advertising industry.

So while the Writers' War Board came up with the words, the advertising industry set about framing the conflict, and the enemy, in pictures. The advertising poster – ubiquitous, cheap to produce and, always, eye-catching – was the mainstay of advertising at this time, and Madison Avenue produced some of its most memorable images in response to the attack on Pearl Harbor.

The general tenor of American propaganda posters was positive, seeking to inculcate national unity and patriotism while getting men to enlist in the armed forces and families to buy war bonds. There was a huge number



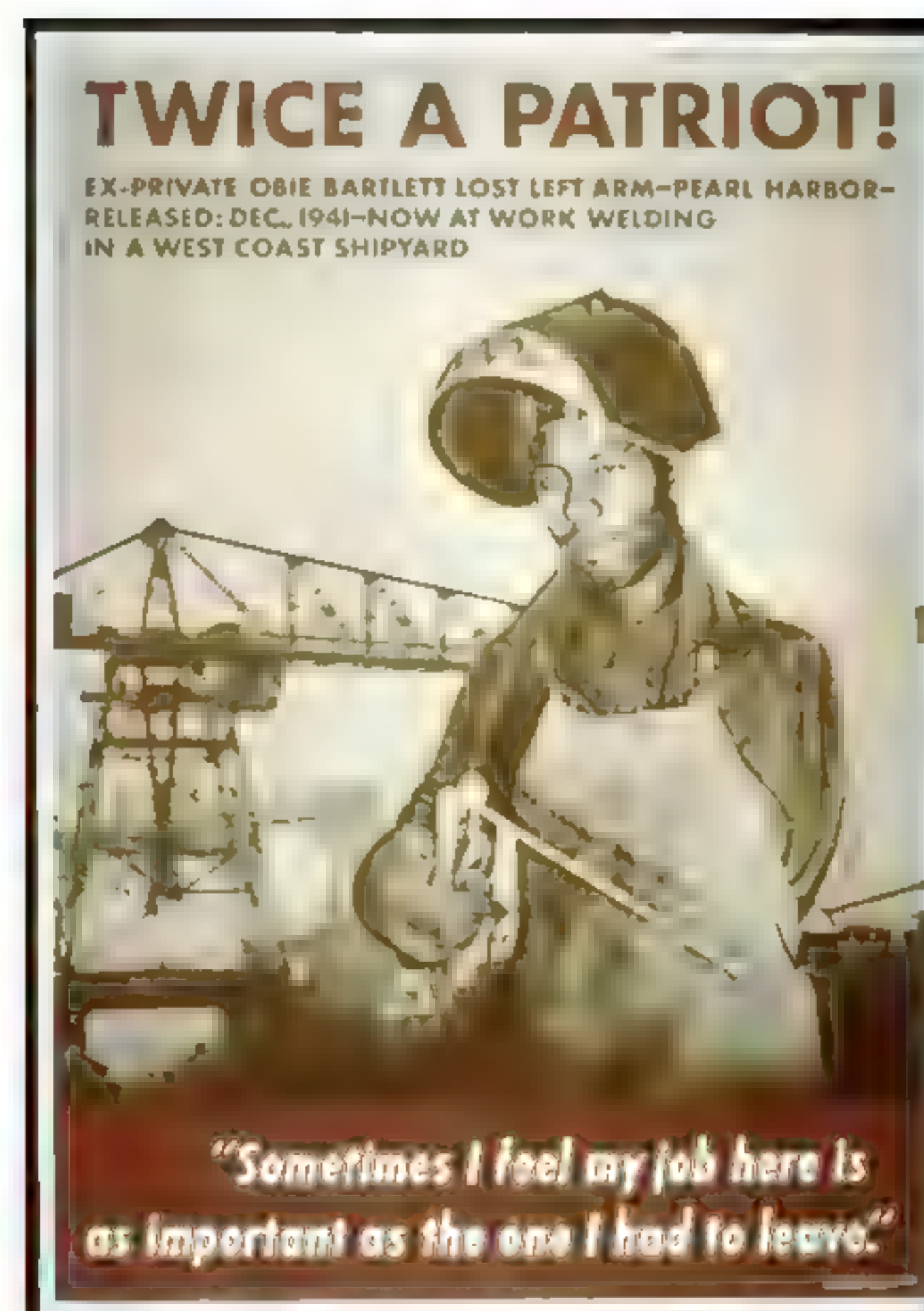
■ War bonds were a vital part of financing the American war effort: Pearl Harbor was an effective sales tool



■ News filtering through of Japanese atrocities provoked virulently anti-Japanese posters in response



■ The man in question was Emperor Hirohito



■ Some posters told succinct stories, as in this one of the wounded Pearl Harbor veteran who went on to serve in war industry



of different designs – close to 200,000 were produced by artists who worked for free, seeing it as their contribution to the war effort.

The Pearl Harbor attack, which was immediately characterised as sneaky and underhand, inspired artists to produce some of the most memorable propaganda posters of the war, with Allen Saalburg's 1942 'Remember Dec. 7th' being perhaps the most iconic of them all. The image, which featured a tattered and bullet-torn Stars and Stripes flying defiantly in front of a background of rising, swirling smoke, included a quotation from Abraham Lincoln's infamous Gettysburg Address: "... we here highly resolve that these dead shall not have died in vain..." Linking Pearl Harbor to the Civil War, the defining conflict of American history, served to ground it in American consciousness and, by invoking Lincoln, prepared those seeing the poster for a road

to victory as long and bitter as that trod by the Union in the earlier war.

One area in which American propaganda depictions of the Japanese differed from those of the Germans was in the personification of the enemy. While anti-German posters usually personified the enemy through caricatures of key Nazi leaders, and in particular Hitler himself, anti-Japanese posters tended to portray a stereotypical Japanese as the enemy, rather than the Emperor Hirohito or other members of the Japanese government. In part this was because Hitler, with his moustache and slicked over hair, was a gift to a caricaturist. But Hitler was also both the leader and the visible face of Nazism: he was its personification.

In comparison, Japanese leaders were much less well known to the average American. However, it is also clear that what to our present-day eyes appear to be clear racist

stereotypes played a large part in how the Japanese enemy was portrayed in war posters: evil, menacing and yellow skinned. This was, though, in part a response to the savagery of the Pacific War. Many Americans initially thought Japan had been effectively suckered into the war by Germany and saw them as helpless stooges in Hitler's schemes. It was the brutality and fanaticism of the Japanese military that changed this perception and the propaganda posters likewise changed.

Pearl Harbor, while clearly an American defeat, was also the first American involvement in the war. As such, propaganda required that heroes be brought forward from the wreckage of the defeat in much the same way that the British turned Dunkirk – a retreat – into something approaching a victory.

Of course, amid the chaos of the day there was no shortage of military personnel who

performed with exceptional bravery. Chief among these was the black American seaman 'Dorie' Miller (he was actually christened 'Doris' but nicknamed 'Dorie' under which name his Pearl Harbor exploits were recognised and publicised). Although at the time of the attack Miller was only a mess attendant – basically a waiter – during the attack and despite not having any training in their use, he manned the anti-aircraft guns, firing off in defiance of the attacking Japanese planes, as well as seeing to the wounded.

In honour of his bravery, Miller was awarded the Navy Cross and he was featured in an iconic recruiting poster. Miller went on a tour of the United States promoting the sale of war bonds but returned to the Pacific theatre in 1943, where he was killed during the Battle of Makin Island.

Some of the best-known propaganda posters dealt with the probably overstated problem of loose talk. To judge from some of the posters, there was a general fear of German and Japanese agents lurking under every bed and round each corner. In fact, the Allies had a huge intelligence advantage throughout the war, having rolled up German espionage networks in short order and through their breaking of the Japanese and German cipher codes. Nevertheless, the emphasis on avoiding loose talk served the higher morale purpose of helping the civilian public at home feel that they too could be part of the war effort.

Pearl Harbor, as the initial defining attack of the Pacific War, cemented into place the stereotype of Japanese military perfidy, which was then followed up by portrayals of the Japanese as fanatical and bloodthirsty. Given that Japanese propaganda emphasised self sacrifice and the purity of the Japanese race, the competing propaganda efforts effectively met somewhere in the middle. Pearl Harbor served as a rallying cry and a call for vengeance and, while Japanese atrocities were added to the roll call during the course of the war, Pearl Harbor remained the first and the most effective. 'Remember Pearl Harbor' became 'Avenge Pearl Harbor' and, on 6 August 1945, it was.



"THERE WAS A FEAR OF GERMAN AND JAPANESE AGENTS LURKING ROUND EACH CORNER"

■ Above: The Japanese dropped this propaganda leaflet during the Battle of the Philippines. It's not entirely clear what they hoped it would achieve



TOGETHERNESS

1942

American propaganda posters emphasised national unity in the great struggle, a unity that had not always existed before the war and was a struggle to achieve after the war. But at least in posters, it existed for the duration.





HOLLYWOOD GOES TO WAR

PEARL HARBOR IN THE MOVIES, ON RADIO AND TV

WORDS BY EDOARDO ALBERT



he wireless. The box that spoke. Today, radio is perhaps the most overlooked medium of mass communication but in 1941 it was both cutting edge and ubiquitous. Most homes had radios and, even if your family

did not have one, you would have known someone who did. Since 1933, President Roosevelt's fireside chats had reassured an anxious nation suffering the effects of the Great Depression: after the attack on Pearl Harbor they would be one of Roosevelt's main channels of communication to the American people about the course of the war.

So it was by listening to the radio that most Americans learned of the attack on Pearl Harbor. The first broadcast was made around 2.26pm Eastern Standard Time when live coverage of the game between the Brooklyn Dodgers and the New York Giants was interrupted by the tersest of bulletins. "We interrupt this broadcast to bring you this important bulletin from the United Press. Flash. Washington. The White House announces Japanese attack on Pearl Harbor." The radio station then went back to coverage of the game (the Dodgers won the game 21-7).

At 2.29pm, NBC broadcast the first news bulletin. News writer Robert Eisenbach announced that President Roosevelt had issued a statement saying that the Japanese had attacked Pearl Harbor but the station then went back to its scheduled programming. CBS, by its good luck, had a news programme scheduled for 2.30pm, so it could continue broadcasting breaking news as it arrived (because programmes were sponsored, the stations were not able to pull any programming without the permission of the sponsors).

The most dramatic of these broadcasts came direct from Hawaii. At 4.06pm a reporter from KTU radio telephoned through to the NBC radio station in New York and – live – described what he was seeing from the roof of the Advertiser Publishing Company Building in Honolulu. As the reporter speaks you can hear the sound of battle in the background.



■ President Franklin Roosevelt speaking to Congress on the day after Pearl Harbor. His speech was broadcast live on radio



■ A scene from Leni Riefenstahl's film *Triumph of the Will*, showing its choreography of mass groups of Nazi party members

"IT IS NO JOKE. IT IS A REAL WAR"

The words crackled out over the airwaves. And then, after one minute 40 seconds of the report, the telephone operator interrupted. The telephone company needed the phone line for an emergency call and the report was cut short. It might be hard to believe in today's era of instant, worldwide communications but in 1941 there were only a handful of telephone lines from Hawaii to mainland America and, with the attack still going on, the lines were being commandeered by the military and emergency personnel. America was at war.

It was radio that carried President Roosevelt's speech to Congress the next day. Over 80 per cent of Americans listened to their president proclaiming 7 December 1941 "a date that will live in infamy". Roosevelt's masterful speech immediately framed and solidified the American response to the attack – and it was radio that brought it into the home of every American. On 1 February 1942, the Office of War Information (OWI) founded Voice of America, the official radio channel of the American government that went on to play a large role in the Cold War and continues to broadcast today. The OWI also produced radio series such as *This is Our Enemy* and *An American in England* as part of the war effort.

But if radio was first out of the blocks with news of Pearl Harbor, it was that most American of media, the movies, that really

cemented the view of the attack on Pearl Harbor as a nefarious and underhanded assault and produced the best work relating to the war. The first Pearl Harbor film – released on 16 March 1942, so it had been scripted, cast, filmed and distributed in the astonishingly short period of 100 days – was *Secret Agent of Japan*, directed by Irving Pichel and starring Preston Foster. Two months later, *Remember Pearl Harbor* is chiefly memorable for helping to popularise the slogan – the film itself was forgettable and, in a classic example of Hollywood advertising, did not actually have much to do with Pearl Harbor at all, being set in the Philippines. *Black Dragons*, starring Bela Lugosi as a Nazi scientist who collaborates with the Japanese to create doppelgangers of six American leaders, actually beat *Secret Agent of Japan* into the cinemas, being released on 6 March 1942. With an original title of *The Yellow Menace*, the film was hastily shot propaganda but veteran horror actor Lugosi (who had specialised in playing Count Dracula) gave his role as mad scientist a sinister edge.

But if the first filmmakers to tackle the war were mostly Hollywood journeymen, the same could not be said of directors of the calibre of John Ford, Frank Capra, John Huston, George Stevens and William Wyler. These were among the greatest directors ever, all at the height of their powers when the war began, and all determined to get into the action. To do so, they enlisted as filmmakers for the Department of War, leaving themselves



■ Colonel James Stewart, United States Air Force

■ Frank Capra, as an officer in the US Army, was officially part of the Signals Corp, although his job remained making films

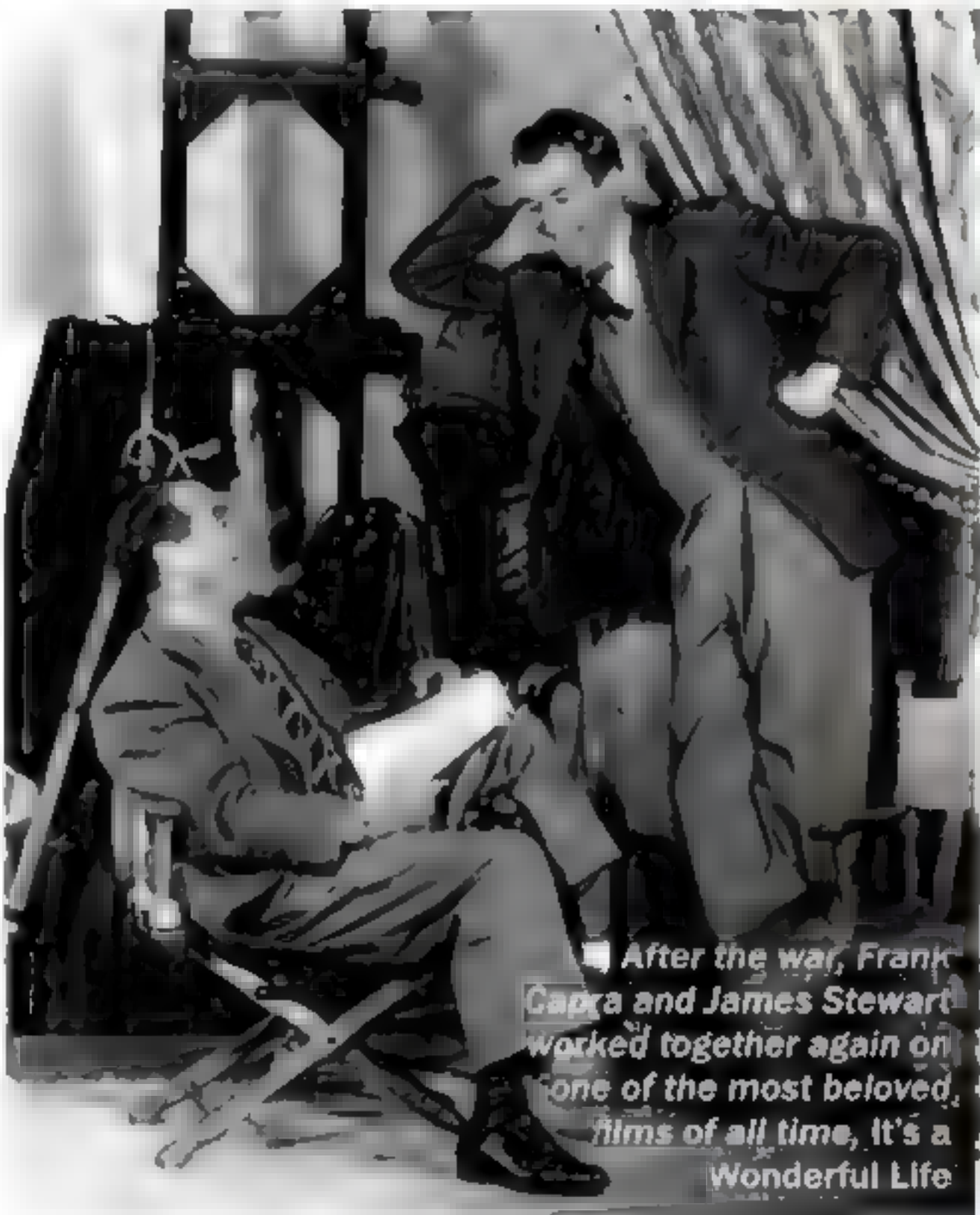


accountable to government bureaucrats but also enabling them to get close, often dangerously close, to the action.

Frank Capra, director of classics such as *Mr. Smith Goes to Washington* (which starred James Stewart who himself enlisted as a pilot in the US Air Force, flying 20 combat missions over Germany and rising to the rank of colonel in the Air Force), was a Sicilian immigrant and a living example of the American Dream. A patriot for his adopted country, Capra enlisted shortly after Pearl Harbor but rather than put him in with the infantry, George Marshall, Army chief-of-staff, asked him to make training films for the thousands of men joining the army.

Capra had just watched Nazi filmmaker Leni Riefenstahl's extraordinary film *Triumph of the Will*. Shot at the Nazi party congress in 1934 it combined new techniques of editing and shooting with the choreographed movements of the massed members of the Nazi party to make something extraordinary. Seeing it for the first time in April 1942, Capra was appalled by its power. The Allies had nothing to match this symphony to Nazism, so he set out to make something that would.

But rather than attempt to match Riefenstahl's Wagnerian vision, Capra made seven documentary films, collectively titled *Why*

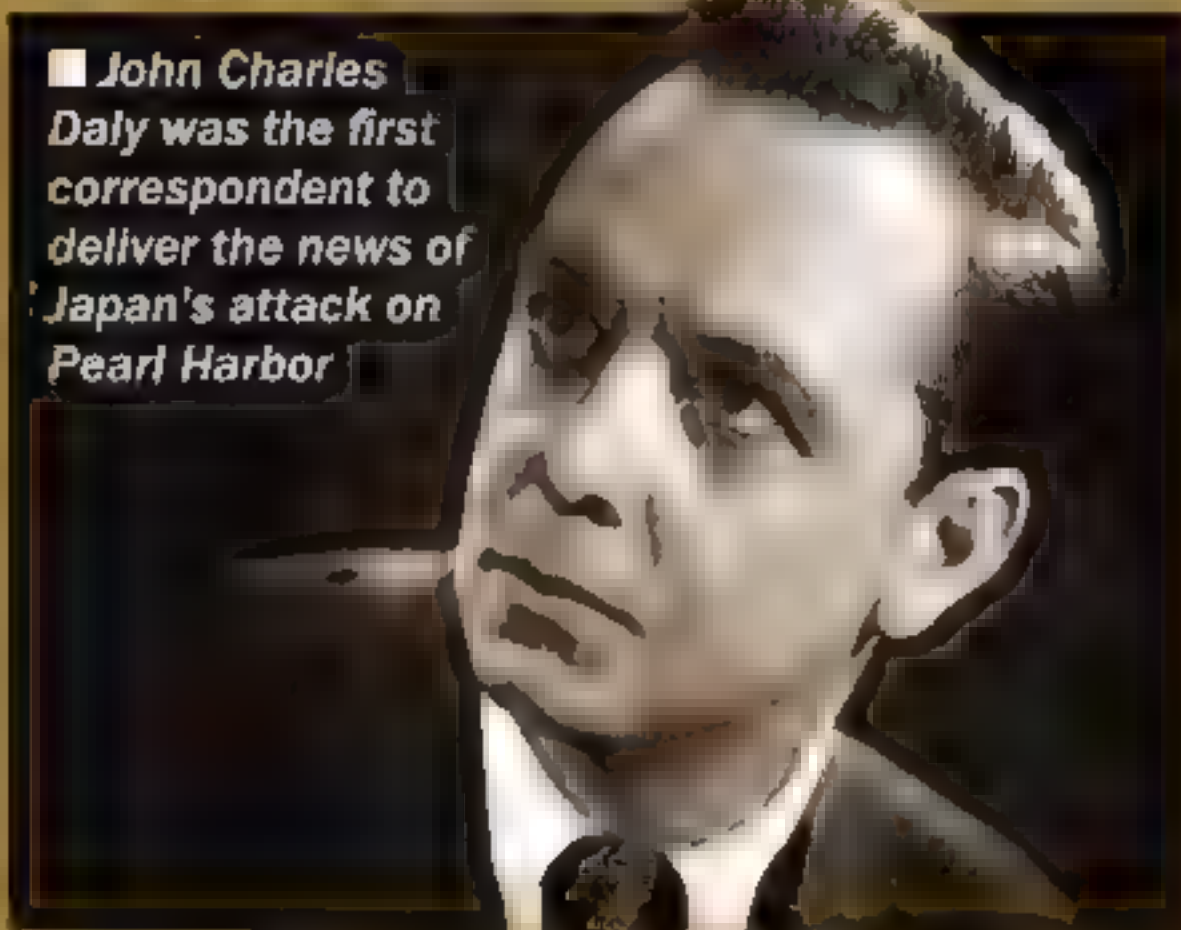


■ After the war, Frank Capra and James Stewart worked together again on one of the most beloved films of all time, *It's a Wonderful Life*

A TV FIRST

Pearl Harbor brought the first news bulletin to be made on a regular medium TV

■ John Charles Daly was the first correspondent to deliver the news of Japan's attack on Pearl Harbor



The attack on Pearl Harbor was a turning point in the Pacific War. The US Navy sank four Japanese aircraft carriers for the loss of USS Yorktown, here being hit by a Japanese bomb

■ The Battle of Midway was a turning point in the Pacific War. The US Navy sank four Japanese aircraft carriers for the loss of USS Yorktown, here being hit by a Japanese bomb



■ Above: Scene from *Secret Agent of Japan*: not the greatest war film ever made

Below: *Remember Pearl Harbor* – memorable chiefly for its stirring title.



'THE ALLIES HAD NOTHING TO MATCH THIS SYMPHONY TO NAZISM'

We Fight. Remember, in 1942 talking pictures had only been in existence for 15 years – YouTube today is older than the talkies were in 1942. It was Capra and his fellow ex-Hollywood directors who created the filmic rules for making movie documentaries on the fly, while filming in locations as varied as a B-17 bomber flying over Germany to the concentration camp at Dachau.

While Capra was making *Why We Fight*, John Ford (*Stagecoach*, *The Quiet Man* and many other film classics), assigned to the Pacific, was on hand, with his cameras rolling, during the strategically vital Battle of Midway, filming from Midway itself: one bomb landed so close to him that Ford was sent flying and the film stock torn from his camera. *The Battle of Midway*, the resulting 18-minute documentary, put the viewer into the action, all but making them feel the bombs falling around them – for the bombs had been falling around Ford.

William Wyler (*Ben-Hur*, *Mrs Miniver*) documented the war in the air, flying many missions on B-17 bombers over Germany. The attrition rate among flight crews, particularly in 1943, was atrocious, as were the flying conditions, with the planes unpressurised so that everyone had to wear oxygen masks and temperatures falling well below zero. Wyler created the documentary *Memphis Belle* that tells the story of the real *Memphis Belle*'s final mission over Germany: the shots of attacking German fighters have an immediacy only produced by reality.

John Huston (*The African Queen*, *The Maltese Falcon*) joined the long grind up Italy, producing a film of the battle of San Pietro that combined reality with staged recreations that highlighted by its very structure the possibilities and perils of documentary filmmaking: did it have to be real to be real?



Filming Operation Overlord (the D-Day campaign), George Stevens took the only colour footage of the Western European front during the war.



Michael Bay's much derided but still profitable *Pearl Harbor* did provide a visceral recreation of the attack.

George Stevens (*Shane*, *The Diary of Anne Frank*) was on Omaha Beach, filming the Allied landings in Normandy, and he recorded the liberation of Paris and the ecstatic reaction of the Parisians. Following the American advance into Germany, he found himself caught up in the middle of Hitler's last counter attack on the Western Front, the Battle of the Bulge, and then, as the war ground towards its close, he found himself among the American troops who first reached the Nazi concentration camps: Dachau, Belsen, Buchenwald. Haunted by what they found at Dachau, Stevens became determined to record it for posterity – and as evidence

should those responsible be captured. The film he shot at Dachau was used as evidence during the Nazi war crime trials at Nuremberg.

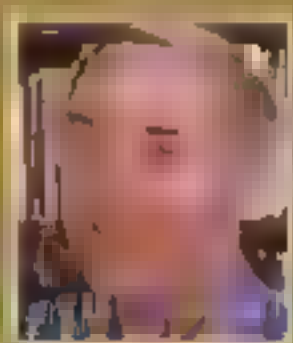
After the end of the war, movies featuring *Pearl Harbor* ranged from the great – *From Here to Eternity* – through to the careful reconstruction of the battle from both American and Japanese viewpoints in *Tora! Tora! Tora!* to Michael Bay's blockbuster, *Pearl Harbor*, that, for all its faults, did throw all the resources of 21st-century Hollywood filmmaking into reproducing the battle. *Pearl Harbor* has also survived on the small screen, featuring in TV series including *Pearl* and *The Winds of War*.

WHAT IF... JAPAN HAD NOT STRUCK PEARL HARBOR?



WRITTEN BY CALUM WADDELL

PROFESSOR ROBERT TRIBB



What would have happened if Japan had not struck Pearl Harbor?

History would have turned out very differently. For a start, it would mean Japan was not going to expand its empire into Southeast Asia – because that is what provoked Pearl Harbor. Instead, they would have been concentrating their war efforts solely in China, which was a conflict that began in 1937. Now, China proved to be more than Japan could chew in diplomatic and military terms. Plus, the USA had its own interests in China and that was what, ultimately, set them to war with Japan.

The USA had imposed a trade and financial embargo against Japan. As a result, Japanese financial assets in the USA had been frozen and they did not have the means to buy anything from abroad. So to avoid Pearl Harbor, Japan would need to do something to accede to American demands – including pulling out from China. My guess is that the Chinese nationalist

government, under Chiang Kai-shek, would have come to terms with Hideki Tojo's government in Tokyo to beat the communists. History would still need to be quite different – for instance, the Japanese would have had to maintain more control over the troops in Nanjing, and not let them massacre an entire city of people, but if things had been less brutal, we can imagine a possible peace treaty between the two countries. Chiang Kai-shek's nationalist government deeply feared Mao and so did the Japanese. So you would not have had Mao – and China would be totally changed.

I think Japan would also have demanded access to Chinese markets. It would be a much more influential and powerful country after the end of the war. And, of course, you would not have had the atomic bomb.

Do you think the USA would have eventually dropped an atomic bomb somewhere anyway?



■ If Japan had not struck Pearl Harbor, the USA may have dropped an atomic bomb on Moscow instead.

At the time, Eisenhower was eager to test it out. Churchill, let us not forget, was considering battling Stalin immediately after the Nazis surrendered. Perhaps Eisenhower would have used it against Stalin after the formation of the Soviet bloc in the wake of the fall of Berlin?

I don't know if I can make a reliable judgement on that, but you are correct – the Americans were thirsting to try the bomb out in a real situation and the idea that they could do it as a pre-emptive strike against the Soviet Union is certainly plausible. Japan would not be the Japan that has the resentment it has now – as the sole country to have been subjected to atomic war, but I suspect it would probably have realised that its economy could win them peace and influence rather than the use of empire and force. I do believe democracy would have won in the end.

At the time, Japan had also conquered Taiwan and Korea. Of course, Chiang Kai-shek fled from China to establish a modern Taiwan that exists, to this day, in a state of uncertainty as a broadly unrecognised 'nation' while Korea was thrust into war. If Pearl Harbor had not happened, how would this have changed?

Taiwan and Korea would eventually have become independent but under tight Japanese control. As with all empires, the Japanese one would crumble, but I suspect Taiwan and Korea would have become de facto puppet states – possibly even today. Of course, there would have been no Korean War and no split between the North and the South. And modern Taiwan would not be recognised as a rogue Chinese province by Beijing.

Hypothetically, could Japan have found a way to expand its empire into Southeast Asia without attacking Pearl Harbor?

Japan would have been very vulnerable in the rest of Southeast Asia if it had not conquered the Philippines – and that country was an American protectorate at the time so they had to hit the USA. Burma was also attractive because it allowed Japan to cut off supplies to the Chinese from the UK. But if you take on Burma you are taking on the British and that means you needed to take on Malaysia and Singapore as well. Japan's strategy had to be all or nothing – they had to take all of Southeast Asia, except Thailand, who were a close ally because there was nothing strategically useful about them. However, French Indochina and Dutch Indonesia were definitely going to be invaded. For Japan, Pearl Harbor was really the sideshow – they were trying to get rid of the US fleet of ships and attempting to stop supplies to the British. It was not about taking Hawaii. Their interest was in expanding to Southeast Asia and removing the Western powers.



■ Troops of Chinese 179th Brigade departing Taiyuan, Shanxi Province, China for the front lines in 1937



■ Japanese soldiers crossing the border from China into the British colony of Hong Kong in 1941

Let's try another hypothetical situation – Japan decides not to attack the Philippines but withdraws from China. Might the USA have come to terms with loosening their trade embargo? And might Japan have retained its empire in Southeast Asia?

I think this is very unlikely. The Philippines is in the middle of the South China Sea and it was able to block Japanese supply routes so it really had to fall. But let's imagine a situation where Japan is just battling against the European colonial powers – it wants them out of there and Tokyo wants to run things. The British were not strong at the time and they did not fight a strong war in Burma. In the end they were only able to battle the Japanese because of help from the Americans. The French, certainly, would not have been able to fight back until 1945, so Vietnam, Cambodia and Laos would have remained Japanese. In Indonesia, the Japanese invasion was transformative because it broke down Dutch power. It also increased Indonesian confidence and the movement for independence, which would have happened but they would have been fighting the Japanese. In the end, if this had transpired – and we take out the Philippines and Pearl Harbor – you have another very different history. The Vietnam War, for instance, does not take place. The Viet Minh would have fought the Japanese and, I suspect, have won. The Japanese were not good with insurgencies. They tended to react brutally, which alienated the populations they were trying to rule – again, look at China. So I think Japan would have handed over independence in these areas, but they would have given the power to people they saw as safe. In turn the local revolutionary movements probably would have overthrown them anyway, such as Ho Chi Minh in Vietnam, and the Western colonial powers would not have returned. Malaysia, I suspect, would have fallen to the communists without the British back in power.

Would the USA have become involved in the war without Pearl Harbor?

HOW WOULD IT BE DIFFERENT?

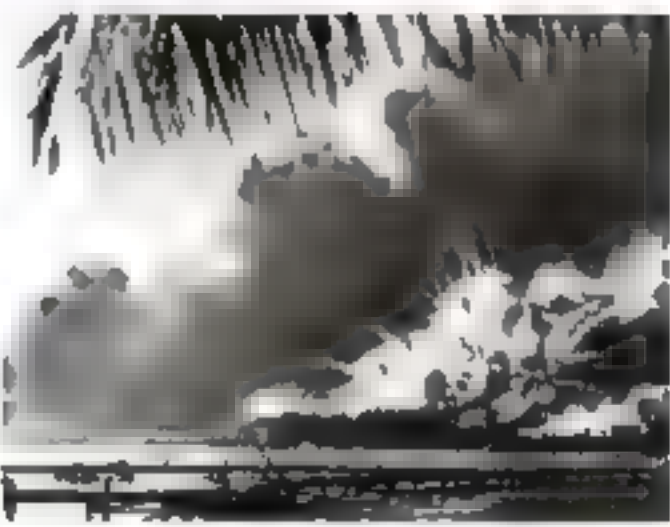
REAL TIMELINE

● **Japan creates the puppet state of Manchukuo**
After the 1931 invasion of Manchuria, and believing that all of Asia should be unified under the rule of Emperor Hirohito, Japan creates a new state, Manchukuo, located in inner (Chinese) Mongolia.
15 September 1932



● **The outbreak of the Sino-Japanese War**
Although tensions between the two countries had been high after the invasion of Manchuria and creation of Manchukuo, it is the increasing number of Japanese soldiers deployed to the mainland that finally breaks Chinese patience. When a Japanese private fails to return to his post, his squad demand to enter the walled town of Wanping. When the Chinese refuse, the Japanese respond with force. What may have been a simple disagreement was the spark that lit a brutal eight year war.
7 July 1937

REAL TIMELINE



● **Pearl Harbor is struck**
A surprise attack on the naval base in Hawaii, an attempt to cripple the US Navy and halt supplies, gives the White House full public support to enter World War II – in Asia and Europe.
7 December 1941

ALTERNATIVE TIMELINE

● **The outbreak of the Sino-Japanese War**
Japan's most challenging battlefield since its annexation of Taiwan and Korea many decades prior begins. However, the army – despite its reputation for brutality – attempts to win over hearts and minds. Nanjing is treated especially carefully.
7 July 1937

▲ The USS Arizona burning after the Japanese attack on Pearl Harbor

"FOR JAPAN, PEARL HARBOR WAS REALLY THE SIDESHOW – THEY WERE TRYING TO GET RID OF THE US FLEET OF SHIPS"

Yes, I think they would have. Roosevelt saw the Nazis as evil and he did want to get involved – but it was winning over the American public that was his problem. I think he would eventually have found a way to justify fighting in Europe. I think it is possible that the USA would not have become involved in Asia, which means – as we just touched upon – you would not have the 20th century as it currently existed, right down to Pol Pot in Cambodia.

Stalin had a non-aggression pact with the Japanese. But on 9 August 1945, he also declared war on the territory. Was this too little too late? How could the Russians have influenced the outcome of all this?

It is interesting because, until Pearl Harbor, the Japanese army felt their next war was going to be with the Soviet Union. They fought them on the borders of Manchukuo and they were chastened by that experience. The outbreak of war with China was in many ways not what the Japanese expected. I think they were anticipating that Stalin would break that pact at some point.

Finally, can you think of any way that the USA and Japan might not have gone to war with each other?

I think we can imagine a possible circumstance where Japan concentrates its troops in China, and sets up puppet

administrations that actually function. The USA, at the time, wanted free trade in Asia, and Japan was looking to create closed areas of financial interest. So let's imagine that Japan did just enough in China for the USA that the White House relaxed its trade ban. In theory, that could have stopped Pearl Harbor. But the main thing that would have stopped the attack on Pearl Harbor is Germany. At the time of the attack, Germany looked as if it was winning in Europe. Japan felt it was going to be on the winning side of the war and it was part of this all-conquering fascist Axis. Six months later, though, Germany was in retreat. If that had happened I don't think Japan would have launched an attack on Pearl Harbor.

● Invasion of the Philippines

With their sights on the oil-rich Dutch East Indies (now Indonesia), the Japanese attack and conquer the American protectorate of the Philippines. Manila becomes one of the biggest victims of the whole of World War II.

8 December 1941

● Fall of Hong Kong

The British colony of Hong Kong surrenders to Japan. Churchill considers it a disaster as this marks the very first British territory to surrender to fascism. Burma (now Myanmar), British Borneo, Malaysia and Singapore would soon follow.

25 December 1941

● Dropping of atomic bombs in Hiroshima and Nagasaki

Eager to test out the power of nuclear warfare, President Eisenhower makes the controversial decision to engulf two of Japan's major cities in a mushroom cloud of death and radiation. The cost to civilian lives remains controversial.

6 August and 9 August 1945

● Tokyo surrenders and retreats from its colonies

The war in Asia comes to a conclusion. Japan retreats from all of its territories, but fighting between the Western powers and their 'liberated' populations continues for years, and in some cases decades.

2 September 1945



● Talks with Chiang Kai-shek

Hideki Tojo's government speaks to Chiang Kai-shek about joining forces against the communist army of Mao. Once the communists fall, Japan agrees to leave China.

28 December 1941



● Eisenhower drops a nuclear bomb on Moscow

With Stalin's forces brutally occupying Taiwan and Korea, the president's flirtation with nuclear weaponry becomes a reality. Moscow surrenders all territories.

6 August 1945

● 'Comrade Godzilla'

Inspired by the bombing of Moscow, the creation of 'Comrade Godzilla' – a mutated red lizard that trashes the Russian capital – thrills viewers all across the world.

9 June 1955

● The USA threatens to freeze Japanese assets

The USA requests that Japan withdraw from China or else all assets will be frozen. Japan begins talks with the White House about a resolution regarding China.

26 July 1941

● Japan removes itself from Hitler's sphere of influence

With rumours that Stalin is prepared to tear up his non-aggression pact with Tokyo, Japan proclaims it is no longer aligned with fascism.

20 August 1941

● Defeat of the Chinese communists

One of the bloodiest struggles of the war comes to a close. Japan wins cautious plaudits for assisting Chiang Kai-shek in his vision for a unified, Western-friendly China.

1 March 1944

● Stalin becomes involved in the war in Asia

Aghast at Japan's aggression towards the Chinese communists, Stalin orders the Red Army to strike Taiwan and Korea, hoping to gain a foothold in the continent.

31 May 1945



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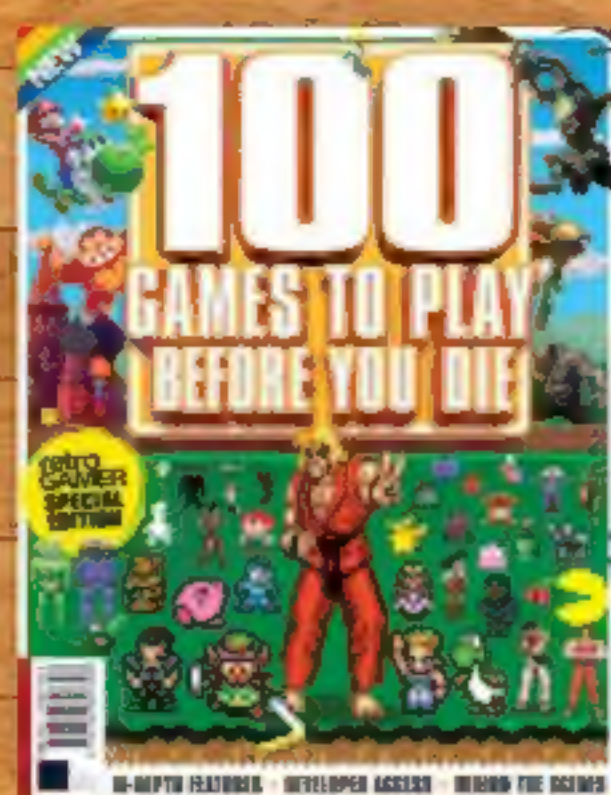
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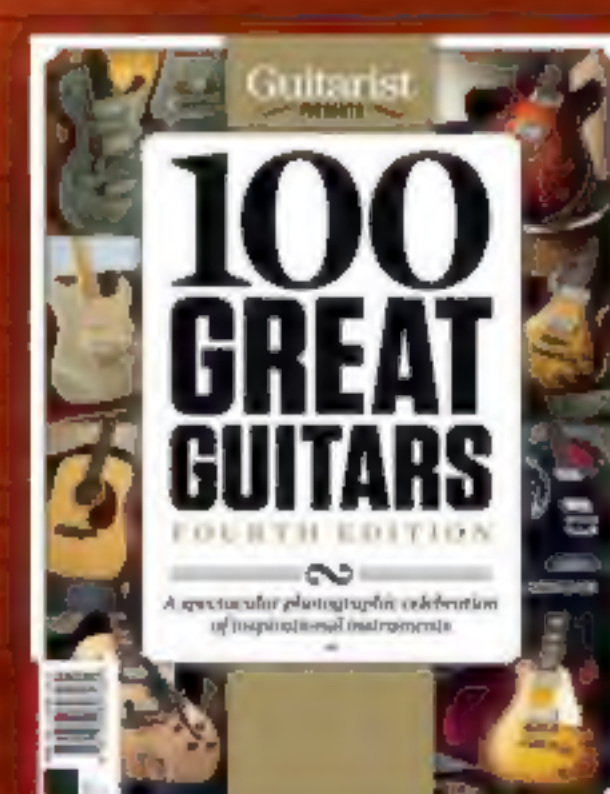
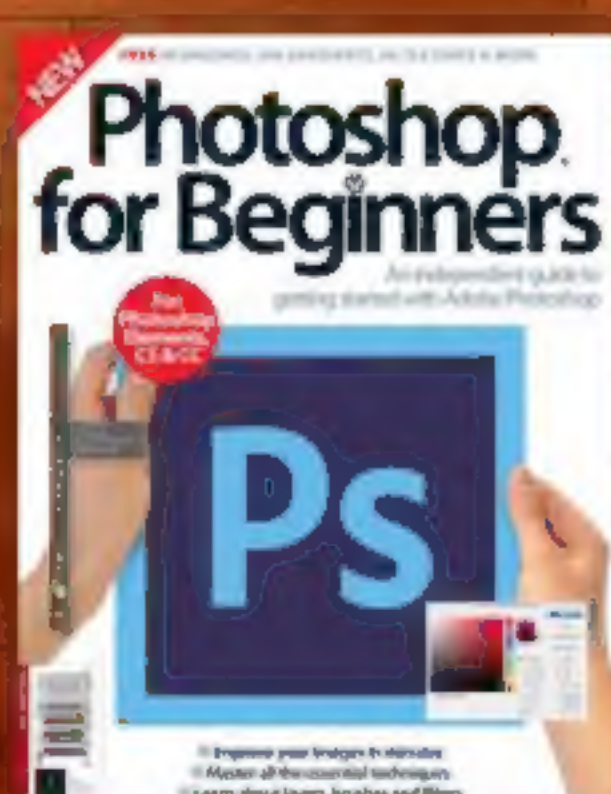
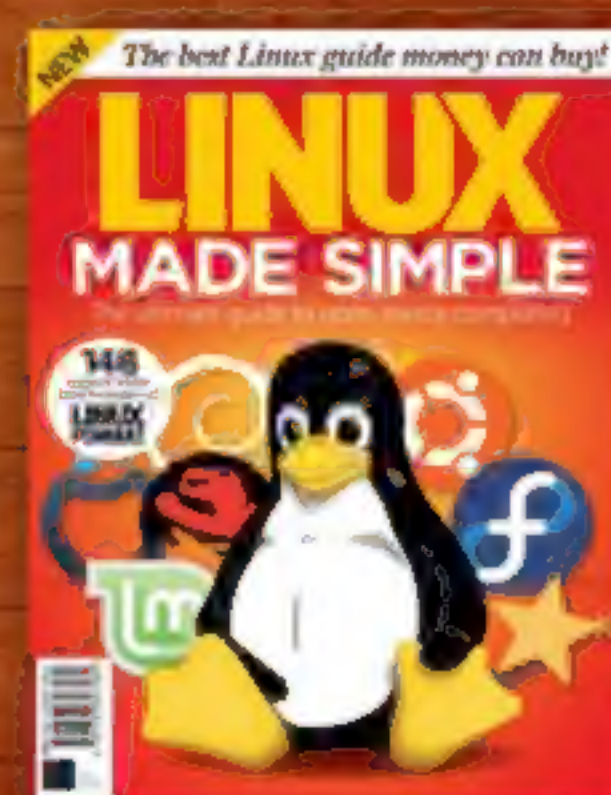


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